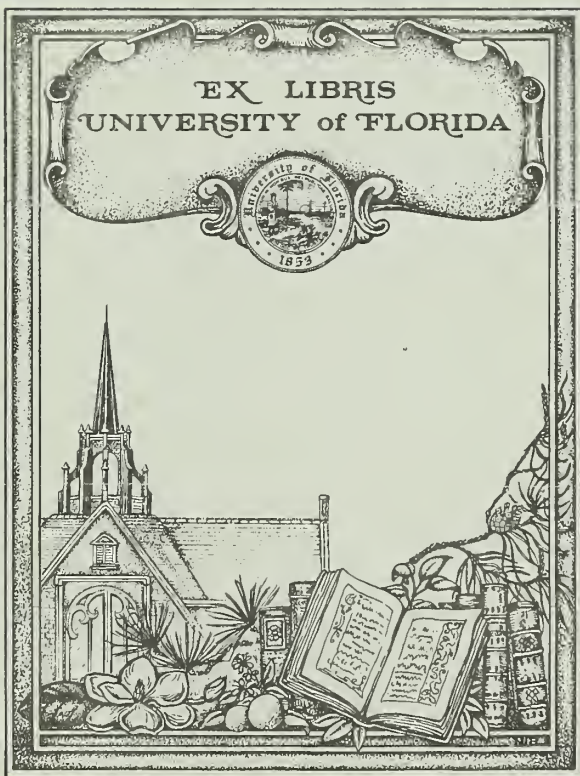


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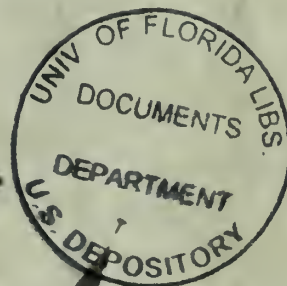
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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

JANUARY 1958

Nav-Pers-O

NUMBER 492

VICE ADMIRAL JAMES L. HOLLOWAY, Jr., USN

The Chief of Naval Personnel

REAR ADMIRAL K. CRAIG, USN

The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN

Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor

John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdel, News

David Rosenberg, Art

Elsa Arthur, Research

French Crawford Smith, Reserve

Don Addor, Layout

• **FRONT COVER: ON GUARD**—Surface-to-air Terrier guided missiles stand alert in launchers aboard guided missile cruiser USS Boston (CAG 1) while crew member passes the word over sound-powered phone. Boston is now with CinCLantFlt.

• **AT LEFT: CRUSADERS ON GUARD** — USS Franklin D. Roosevelt (CVA 42) makes her way through gray seas as F8U Crusader jets are readied for launching on her catapults.

• **CREDITS:** All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated. Photos top left and bottom page 37 by The Commercial Appeal.



MOBILITY OF SEA POWER—Super carriers and atomic subs give today's Navy far reaching striking power.



GUIDED MISSILE cruisers pack a big punch in launchers.

SecNav and CNO

At the beginning of the New Year it's time for a recapitulation on the status of the New Navy. On this and the following pages *ALL HANDS* presents a report from twelve top Navymen on those aspects of the Navy which will play a significant role in the months to come. We start off with the statement of Secretary of the Navy Thomas S. Gates, Jr.

THE KEYSTONE ROLE of seapower and the Navy's vital place in the scheme of national defense is given full recognition in our sound defense organization by top government leadership. In the Defense Department, we have made great progress not only in building a New Navy, but a closer knit, smoother functioning, mightier defense machine—across the board—than we have ever had before.



SecNav Gates

Our balanced forces make up an Army, Navy, Air Force, Marine team of which all Americans can be proud.

In the design and organization of these forces, full recognition has been given to the "object of the ball game." The object is to provide military force sufficient to insure, working with our Allies, the peace and security of the free world.

For this we need forces sufficient to support our policy in *cold war*, sufficient to *deter piecemeal aggression* and to win decisively in hot but *limited war*, and sufficient to make it unthinkable to any aggressor to resort to *thermonuclear war*. This much we need—no more, no less.

Roles of the Navy

Within this framework and balance, what are the roles of the Navy? We feel they are these:

- To provide military, economic and political links across the seas for the nations of the free world, and to deny corresponding linkage to the nations of the Communist bloc; and second,
- To use the ocean areas as a springboard for offensive operations, and as a vast maneuvering area for the defense in depth of ourselves and our Allies.

Mobile naval power protects our interests in areas where we do not and cannot maintain permanent bases.

Naval power gives us the power of choice. Our government needs a choice of action when confronted with a dangerous international situation. It is as true today



OVER, UNDER AND ON the seas the New Nuclear Navy with its guided missiles is a powerful force for peace.

— The Job of the Navy in '58

as ever that military forces with many capabilities are an absolutely vital tool to provide needed alternative methods to project U. S. power overseas.

Our naval task forces are tailored to:

- Military principles of mobility
- Concentration of power
- Economy of force

Precisely because of our ability to develop and use the new weapons systems, the Navy is a force of relative economy—which makes its future certain.

THE CHIEF OF NAVAL OPERATIONS SAYS

Here is an over-all brief on the New Navy, by Admiral Arleigh Burke, USN, Chief of Naval Operations.

THE NEW NUCLEAR NAVY is here today—a truly modern force with a ready mobile arsenal of missiles and nuclear weapons, soon powered by nuclear energy. The New Navy is a powerful force for peace.

Nuclear mobility and tremendous striking power keynote this modern Fleet. It is an integrated combat unit—a fast-moving—hard-hitting—self-contained force that carries its firepower—aircraft—missiles—and landing forces wherever it goes. But, the true significance of the new scientific Navy lies in the unlimited opportunities it creates for all hands.

This new scientific Navy is a fine tribute to technological achievement, pioneered by dedicated personnel in the service. Both have been essential to the progress personified by this modern Fleet.

The Navy of the Future—Today

Recently many modern ships were saluted with pride and satisfaction as they joined Fleet formations for the first time and strengthened our naval force. The arrival of these modern men-of-war has justified our profound faith in the Navy of the future—

• Nuclear-powered submarines—the first arrivals—brought us to the threshold of the modern age of mobility and endurance. *Nautilus*, our first, steamed 62,000 miles on a lump of uranium the size of a lightbulb.

• The modern *Forrestals* form the sinew and muscle of the New Navy's balanced and ready striking power.

• Operational missiles already in use by the Fleet today provide us with additional strength for security.

• *USS Boston* is the vanguard of a missile cruiser force without equal among the world's naval powers. They will insure that the air above surface forces is controlled by the Fleet Commanders, and will supplement long range naval striking power.

• Fleet ballistic missiles like *Polaris* will soon provide a new dimension of deterrent strength for the New Navy.

Fleet Marine Forces

An integral part of the New Navy, the Fleet Marine Forces are combat-ready for immediate action throughout the world. The Marine Corps has evolved progressive concepts of warfare in keeping with their historic role.

Our Fleet Marine Forces contribute concentrated assault power to this powerful Navy-Marine team. Vertical envelopment techniques provide the modern means of projecting seapower ashore in support of the naval missions.

In the nuclear-missile age a premium is placed on our ability to move and disperse. *The sea has become the frontier for future dispersal.* The sea provides vital strategic space and time—when these factors count.



ADM Burke

Ready and Mobile

The New Navy is a ready mobile Navy. Its tasks are complex and varied.

This naval power is instantly available to our government's needs throughout the world. For this reason our Navy has become accepted as the precision instrument of national policy.

New opportunities have unfolded. Opportunities for greater service—increased knowledge—greater contributions to national security—and greater personal satisfaction from a job well done.

Science and technology have provided the tools—the New Navy must provide the spirited leadership to insure that the job is well done. *Today's young petty officers and junior officers have the challenging opportunity to become tomorrow's leaders in the Fleet for the future.*

Change and Progress

The New Navy is already a part of us. Its altered appearance emphasizes change and progress. Beneath this modern profile is the true spirit of the Navy—the individual sailor doing an effective, necessary job. It is the men in the Fleet who spell success or failure in our mission to maintain freedom of the seas in peace, and to control the seas in war.

Revolution in Naval Weapons . . .

Vice Admiral John H. Sides, USN, Director of the Weapons Systems Evaluation Group in the Office of Secretary of Defense, gives this report on the potentialities of naval weapons and weapons evaluation.

IN THIS DAY AND AGE, with all the unbelievable developments of the past several years, our Navy's weapons systems are undergoing a true revolution.



VADM Sides

You will understand what I mean if you will reflect upon the fact that our fighters fly faster than the speed of sound, that submarines and cruisers can deliver tremendous destruction at ranges of hundreds of miles, that airplanes or whole formations of airplanes can be knocked from the skies from surface ships dozens of miles away, and that

enemy submarines can be detected and killed with a certainty unhoped for just a few years ago.

All these new capabilities—and there are more to come—don't just happen. They are the result of far-sighted planning, painstaking research and development, production of a quality hitherto unknown, and thorough testing and evaluation.

Tests and Demonstrations

Once the tremendous task of development and initial testing has been completed, the contractor is required to put on a full demonstration that he has met the terms of his contract by actual tests at the appropriate proving ground.

Once this has been accomplished there is conducted a Navy Bureau evaluation, in which Navy crews prepare the missiles for firing and actually put the systems through their paces with a view to uncovering any shortcomings which might detract from their usefulness in the Fleet. By the time the appropriate Bureau puts its stamp of approval on a system, it has really been "wrung out," but it still hasn't been to sea in the hands of the people who use it in case of hostilities.

Operational Development Force

Many years ago the Navy wisely established the "Operational Development Force" under CinCLant Fleet.

This force consists of a large staff of experts in the various fields, plus certain ships and squadrons more or less permanently assigned. Other ships and squadrons are assigned temporarily to ComOpDevFor, for periods varying from a few weeks to several months, whenever

new weapons systems are ready to go to sea. This is where the final graduation exercise takes place.

These tests, conducted entirely by our seagoing personnel, cover every conceivable facet of the system, including actual tactical situations, the full logistic system, including replenishment at sea, training methods and procedures, maintenance problems, and the like. Tactics and doctrine are also developed.

Effective Weapons System

All this may seem like a long-winded procedure which could delay the time when we get effective weapons systems into service use. But this is one field in which haste really makes waste. When we consider the budgetary situation of today, and the cost of these new weapons systems, it is clear that we must be sure of our course. We must be certain, before we go too far in replacing the armaments of our ships and planes, that the new system does not contain any fatal defects which would prevent its effective employment against an enemy when the chips go down.

MISSILES FOR THE NAVY

The increasingly vital role of guided missiles in ships and aircraft of the Navy is discussed by Vice Admiral John Edward Clark, USN, Director of the Guided Missiles Division in Office of Naval Operations.



RADM Clark

GUIDED MISSILES have long since left behind the day when they were laboratory curiosities. The basic sciences have been mastered and missiles in all categories are working articles. The technical problems now are to:

- Increase reliability, and
- Extend performance in range, accuracy, counter-measures and serviceability.

I don't mean to belittle these problems, they are by no means minor and will yield only to the wholehearted attack of highly competent technical people.

But the point is that *missiles are in the Fleets—in ships, submarines and aircraft* and where we go from here depends a great deal on the Navyman at sea whose job it is to use them.

Men and Missiles

Guided missiles, more than any previous weapon, are dependent on the proper functioning of a complete system. And like automation in industry, these so-called "automatic" devices do not eliminate the man but on the contrary make his position in the system

NEW WEAPONS AT SEA—Terrier and Regulus are now well established veterans of Fleet's growing missile force.



In a Missilized, Nuclear Fleet . . .

more important than ever. The missile will do its job only if every man in the system has done his job perfectly—excellent isn't good enough, it must be perfect with all that it implies.

Equipment must not only be operated precisely but must be checked and adjusted to peak performance. If one man among many, or one piece of equipment among many, falters, the enemy plane gets through or the missile doesn't reach its target or the enemy sub escapes. If the operator's job has been done right, then the technical man can put the finger on failures and mechanical weaknesses can be corrected and increased performance can be engineered.

Getting Rid of the Bugs

There is much that can be done toward working out bugs in systems during the development and evaluation phases. But in one area of system development, we can only call on experience and judgment—and the sailor at sea must come to our rescue. This is serviceability. Is the handling equipment adequate? Should the check-out equipment have more or fewer inputs? Is it faster and safer to have folding wings or quick attachables? Are the pointed wing tips dangerous? Are the shipping containers manageable? Are the handbooks adequate? All these questions and hundreds more like them must be asked by the operator and to many of the questions he must also provide the answer.

The final requirement for the successful transition to a missilized Navy is patience. The first systems will have many weaknesses but only by getting them into the Fleet and working with them will we make progress.

IMPORTANCE OF NUCLEAR PROPULSION

Nuclear power will have a tremendous effect on your Navy. Here's a report from Rear Admiral Hyman G. Rickover, USN, who heads Navy's Nuclear Propulsion unit in the Bureau of Ships.

THE NAVY'S TRANSITION to nuclear propulsion is well underway. The reasons for this rapid transition are simple. Nuclear power permits a ship or a whole Fleet to get *where* it wants *when* it wants.

- All new construction submarines will be nuclear-powered.

- In the surface Fleet, work has started on a nuclear-power plant for each of the three basic combatant types; the aircraft carrier, the cruiser and the destroyer. Ships already have been authorized for the first two types; a large destroyer (frigate) will be requested in the Fiscal year 1959 shipbuilding program.

For submarines it is accepted that freedom of move-

ment marks a tremendous improvement in submarine capability. Our diesel submarines were tied to the ocean surface. If they wished to move fast under water, they could do it for only a short time; if they wished to remain under water for as much as 24 hours they were restricted to slow speed and a small submerged radius.

Now all that is changed. Nuclear-powered submarines are even faster under water than on the surface; their extremely long ranges are becoming even longer.

Nuclear Mobility

It was not fully realized until *Nautilus* actually operated, just what a tremendous advantage of mobility the ship possessed. *Nautilus* could move with complete freedom beneath the seas.



RADM Rickover

The day of the diesel submarine was over.

What will nuclear power mean to surface ships?

An individual ship, such as the guided missile cruiser *USS Long Beach* will, like the submarine, experience a great increase in mobility. It is well known that the captain of a ship must take heavily into account his available fuel oil supplies when planning any operation. The selection of speed is a balance between the desire to arrive at the destination in the shortest possible time and the need to minimize fuel consumption. The World War II Pacific operations are one long history of the struggle with supplies and replenishment. Nuclear power eliminates the problem of refueling at sea.

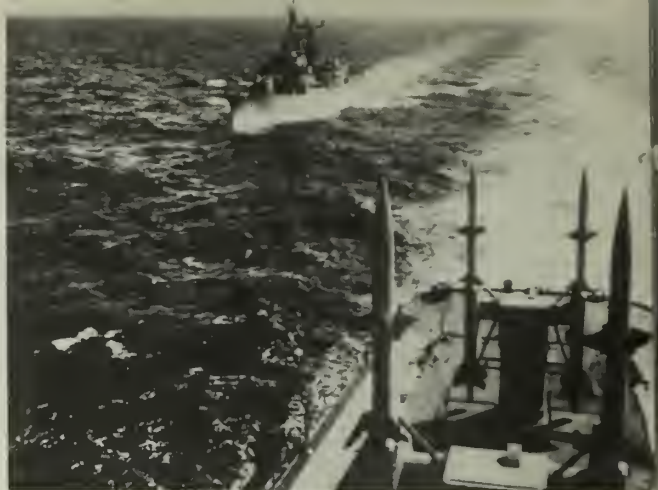
Nuclear Task Force

A task force by its very name, implies a group of ships which can be dispatched to a certain locality to perform a task. The ability to maintain such a force at sea in constant and rapid movement and to deploy it over great distances, without the necessity of concern over fuel supplies, will give to the task force a vast improvement over present day task forces.

All of the Navy's nuclear plants have one vital requirement: *intelligent, well trained crews*. Skill is needed to operate the plant and to maintain it. The training is difficult; it takes hard work and long hours of study. It represents a challenge to the men of the Navy, and I am proud to say that the men of the Navy are meeting this challenge. Personnel are needed from all units of the Fleet to work and learn so that they may do their part to help in the transition of the Navy from oil to nuclear power.

RECENT ADDITIONS to our nuclear powered submarine Fleet—*USS Skate*, SS(N), 578 and *USS Sargo*, SS(N), 583.





THE MISSILE-ATOMIC age has brought about rapid changes in weapons and their systems in Navy ships and planes.

The Latest in Fighting Power . .

New missiles, mines, bombs, torpedoes and other weapons are here or on their way into the New Navy. Here's a report from the Chief of the Bureau of Ordnance, Rear Admiral Frederic S. Withington, USN.

THE RESPONSIBILITY of providing weapons for the New Navy is a tremendous challenge. We in the Bureau of Ordnance who bear this responsibility and deal daily with its challenge are acutely aware of the Fleet's need for weapons of ever greater range, power and accuracy.



RADM Withington

The missile-atomic age into which we have progressed has placed unprecedented demands upon the designers of weapon systems for the Navy and, in turn, the new weapons systems call for greater proficiency from

the officers and men who man the Fleet.

The needs of the Fleet are the Bureau's first concern and a basic aim is to provide, along with superior performance, a built-in reliability and "maintainability" greater than that which has, up to now, been considered acceptable.

Samples of Post-War Developments

In the post-war period a number of new weapons have been released for service use:—

- An important first was *Terrier*. Its installation in *uss Boston* gave the U. S. Navy the world's first guided missile ship. The air-to-air missile *Sidewinder* is probably the most effective such missile anywhere in the world.

- To deal with the submarine threat there are new ASW homing torpedoes for use by submarines, destroyers and aircraft, plus another important first, the recently announced nuclear depth bomb, *Betty*.

Progress in 1958

These are a few significant examples of the new weapons for the New Navy. Looking ahead into the year 1958 there is a promise of more notable progress.

- The dual purpose missile *Talos*, useful against surface as well as air targets, will enter the Fleet in *uss Galveston*. *Talos* will provide defense against high performance air targets in a volume over 2000 times as great as that covered by conventional antiaircraft guns.

Work is well underway to double the performance of the current *Terrier* and to improve still further the performance of the famous *Sidewinder*.

- The Bureau has been involved in the development of nuclear weapons since the earliest days of the Manhattan District Project. In continuing collaboration with the AEC it is bringing to release for service use an ever greater number of nuclear weapons to provide for a variety of tactical applications.

- The Mk 37 torpedo is a new high-performance, homing, antisubmarine torpedo which has already been accepted for use by submarines. It is now under evaluation for destroyers and it is anticipated that it will soon pass this test successfully. A weapons system which will permit a surface ship to destroy submarines at greatly increased ranges is undergoing shipboard evaluation and another system, with much greater potential, is under development.

- New mine developments continue to come along with gratifying frequency. The emphasis is on the submarine target and resistance to sweeping. Today's mines are more insidious than ever and a modern minefield is a truly formidable obstacle.

In this era the phrase "the man behind the gun" can well be changed to "the man with the weapons system." It is with this latter concept in mind that the Bureau of Ordnance faces its task of providing for the complex needs of the Fleet. The man or the weapon, alone is useless—only the combination can produce the ultimate result of destructive energy released at the right place at the right time to accomplish intended result.

YOUR NAVY—PRODUCT OF SCIENCE

Science and Research have been responsible for tremendous changeovers in the Navy. How science affects the Navy is discussed by Rear Admiral Rawson Bennett, USN, Chief of Naval Research.

THE REVOLUTIONARY nuclear-powered Fleet of the future now under construction is more than anything else a product of science.

The design and production of an advanced component or a new type of propulsion plant cannot begin until the scientist tucked away in his research laboratory has some time before worked out the principles in theory.

The relationship between scientific research and a



BEHIND THE SCENES—The Navy's men of science are working to develop new and better gear for the Fleet.

Science Creates a New Navy . . .

new electronics device or guided missile is not readily apparent. This is because the work of the scientist is not aimed directly at a new development. His primary interest is in unlocking nature's secrets and giving us new knowledge about the basic forces of the universe. The practical value is that once man learns how and why something happens, he can then harness these forces and make them go to work for him.



RADM Bennett

Basic Research—Tool of Science

This search for new knowledge is known as *basic research*, and it is the primary concern of the Office of Naval Research.

ONR was established just after the end of World War II to make certain that the Navy would have the advantage of the latest scientific knowledge

in designing and building its postwar Fleet. By sponsoring and financing research projects mainly at universities and other academic institutions, the Navy not only gives a much needed boost to this country's basic research effort in general but also is in a position to convert this knowledge quickly to naval applications.

Let me illustrate with an actual example:

A perennial problem is to design radar sets with increased range. An important key to this is to find efficient ways to amplify microwaves. Basic research in "solid state" physics, which is supported by ONR, recently came up with a new means of doing this. Known as the *maser*, it is not an electronic process but depends on molecules. It can amplify or oscillate with virtually no increase in background "noise." A radar receiver using this *maser* as a microwave amplifier will eventually be built and *will radically extend detection ranges*.

A Bonus for Everybody

Navy-sponsored research not only gives the Navy new weapons and devices but provides the general public with a bonus. For example, a recent product of the Navy's research effort is the transparent flat plate television picture tube developed to provide a new type of aircraft instrument panel. The pilot, instead of busily scanning numerous dials and gauges, gets his informa-

tion from a pictorial display generated by a small compact computer. This TV tube may well revolutionize home television since it makes possible a far superior and more efficient and simple black and white and color TV tube and may lead to three-dimensional viewing.

The broad scope of naval operations explains our interest in scientific observations and experiments involving every environment between the *poles of the earth* and from the *depths of the ocean* to *outer space*.

Navy and IGY

This is why the Navy is a major participant in the program of the International Geophysical Year or IGY. In addition to our deep involvement in the earth satellite program, the Navy's research rockets and high altitude plastic balloons are gathering for science a great amount of data about the phenomena in the upper atmosphere, the sun and cosmic rays.

This information will lead to improvements in *weather forecasting*, *long-range communications*, *map-making*, and *navigation*, all of which are important to future naval operations.

Navy research is not only aimed at the machines of the future. The Navy is vitally concerned about the men who will be called upon to operate these machines. As the Navy's technological progress speeds forward, the Navyman is being asked more and more to undergo new stresses and strains that few could imagine a decade ago.

Breaking the Trail for the Navyman

Whether he is required to live for weeks beneath the sea in a nuclear-powered submarine or to be hurtled through the air at supersonic speeds, Navy research has broken the trail ahead of him to assure his safety and ability to withstand these conditions with margin to spare.

In preparation for the demands of the future, ONR is doing things like Project Stratolab, which has sent a team of naval observers as high as 86,000 feet into the stratosphere where they remained for several hours. In these ways, information is gathered leading to the eventual conquest of space.

We cannot forecast all that will be part of the future, but we do know that it is *the Navy's basic research program* underway today that will make them possible.

Navy's Role in the Atlantic . . .

What is the job of the Atlantic Fleet in today's and tomorrow's Navy? To get the answer to this question we turned to Admiral Jerauld Wright, USN, Commander in Chief, Atlantic and U. S. Atlantic Fleet, and Supreme Allied Commander, Atlantic (SACLant).

YOU CAN LOOK AT the Atlantic Ocean as an idea. Behind the Atlantic Ocean Idea lies the changing character of the Atlantic Ocean itself, which was for centuries a large, mostly empty body of water, allowing free passage of ships bent on exploration, colonization and commerce.



ADM Wright

Later, for us on the western shore, the Atlantic was a barrier against aggressors, a barrier seemingly impregnable in nature. We have seen this barrier weakened and our isolation crumbled by the seven-league

boots of modern science. We were convinced of the importance of friends and allies—and we joined an organization created to meet the needs for collective security in the nuclear age.

NATO—Collective Security

Although the collective joining of nations to preserve security is not new, the scope of the Atlantic Ocean Idea, embracing the many NATO nations, is vastly greater in area and population than any other such organization in the world.

Supporting this organization from day to day is the job of the men of the Atlantic Fleet. The Atlantic Ocean Idea, to be made a reality, demands increased readiness of the men and ships of the Fleet at sea, often far from home and for relatively long periods of time.

When we subscribed to this idea, we realized that we must modify certain desirable features of scheduled operations to reflect this increased readiness. The present deployments are an important part of this increased readiness. They enable us to meet more effectively the Atlantic Fleet commitments to perform certain missions and tasks in the interest of national security. Fortunately the tasks involved in this big job increase rather than lessen the opportunities to develop our skills as seamen.

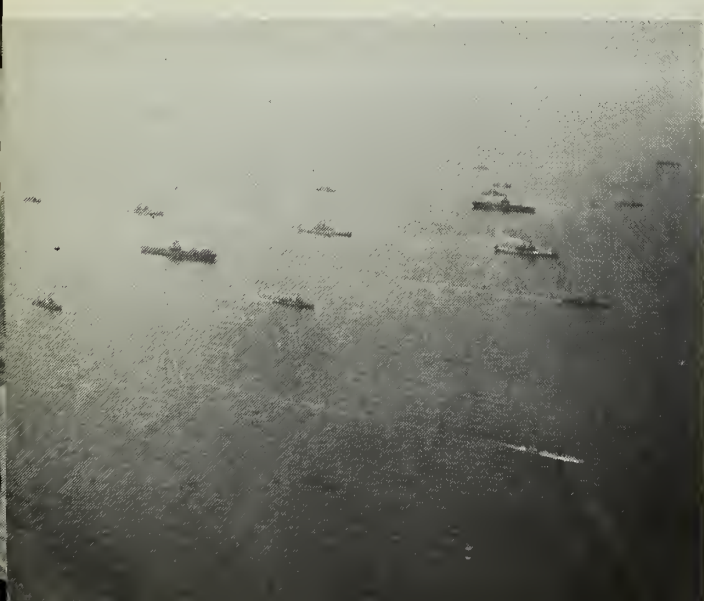
On the Defense, On the Offense

With the advent of nuclear-powered ships and guided missiles comes the need for intensive training designed to orient each and every man, unit and Fleet component toward the necessary cooperation with our NATO allies. This is required to enable us to carry out defensive and offensive concepts, in order to minimize the threat imposed by an enemy bent on obtaining control of the Atlantic and on cutting our communications with our allies and overseas land-based forces.

The protection of merchant shipping, the life line between our industrial potential and its strategic raw materials, also comes within the realm of the Atlantic Fleet's wartime tasks. Our strategically placed ASW forces and ocean AEW barriers lend inestimable assistance to the air defense of the United States. They also assist in keeping the shipping lanes clear of submarines dispersed to destroy allied merchant shipping and troop movement in war.

The importance of continual intensive training, on a unit and Fleet level, cannot be over-emphasized. The ability of the United States and its allies to launch effective strategic offensive operations against sources of enemy naval power must be maintained. We maintain this ability through our mobile striking forces which are well trained, well balanced forces comprised of men and ships which react with assurance during any emergency or during any type of war.

Our tasks in the Atlantic, whether they are *logistical, amphibious, sub-surface, striking force, antisubmarine defense force, barrier force*, or whatever phase in which you may be engaged within the Atlantic Fleet, serve



And in the Pacific Ocean Area . . .

a common objective—the determination to retain allied control of the Atlantic.

The retention of the confidence of our allies in our ability to uphold our belief in freedom and the rights of individuals, and our contribution of offering a powerful deterrent capable of discouraging any aggressor, depends directly on the Atlantic Fleet.

Understanding this, we can all see that by our presence and through our skills, the Atlantic Ocean Idea grows in strength and in contribution to the defense of our homes and loved ones.

THE JOB IN THE PACIFIC

The Pacific is the largest maritime area in the world. Reporting on the Navy in this area is Admiral Felix B. Stump, USN, Commander in Chief, Pacific and U. S. Pacific Fleet.

TO BRING THE PACIFIC OCEAN into focus as an idea—a military concept—it is necessary to look at a globe of the world. Turn the globe around until the Pacific Ocean spreads out before you with the International Date Line directly in front of you. The Hawaiian Islands, where CinCPac headquarters are located, will be slightly to your right. Pearl Harbor lies 2100 nautical miles west of the North American coast, but the coast of Asia measures some 3500 miles further to the west. Truly a vast area of enormous distances even in this shrinking world of jet travel.

Hold the globe up and the side facing you is almost all blue—the largest maritime area in the world.

- The Pacific Ocean and the countries that ring its perimeter cover more than half of the earth's surface. Within this area lie many countries—some friendly and

some unfriendly—representing a major portion of the political, economic and military power of the world.

- The Pacific Command is not mere geography. The lines drawn by the Joint Chiefs of Staff are for guidance only. The true significance of our responsibility rests with the forces assigned here, and our allies in these areas. Without a strong and modern force, composed of Army, Navy (including the Marine Corps) and Air Force working hand in hand with our allies, those lines of responsibility would be empty of meaning. They would be simply statements of intention rather than determined forces in being.



ADM Stump

To Defend This Area

Look at your globe again. You will see that to defend this area and to use the Pacific as a bridge to our friends in

Asia, Australia and New Zealand, we must have *mobile striking forces and control of the seas.*

The United States Pacific Fleet with its Fleet Marine Force is ideally suited to meet this challenge. Together with the Pacific contingents of the Army and Air Force, the Fleet stands ready to meet aggression and to punish those aggressors. Our modern forces can be tailored in size from the largest nuclear weapons to the helicopter carrying a Marine fire team.

With the addition of the new attack carrier, *uss Ranger*, and the new nuclear submarine, *uss Sargo*, and the introduction of the most modern aircraft and missiles, 1958 will see a strengthened, harder-hitting Pacific Fleet.

The most modern weapons systems are vitally needed because so much geographic area must be covered with so numerically few units.

But the most modern of weapons are of little value without the officers and men who must operate them. Only through training and the dedication of these men has the Pacific Fleet gained its stature as one of America's primary fighting forces. It assures us, as it assures our friends in Asia, that these men, with their weapons, are quite capable of preserving our freedom.



Eyes on Sixth, Seventh Fleets . . .

To the Navyman the Mediterranean means the Sixth Fleet. The job of this trouble-shooting force and its readiness are discussed by Vice Admiral Charles R. Brown, USN, Commander Sixth Fleet, and Commander, Naval Striking and Support Forces, Southern Europe.

THE WORD readiness takes on a very special meaning here in the Mediterranean. On these ramparts of the Free World the Sixth Fleet must be ready for whatever the next hour may bring. And who can say what that will be?



VADM Brown

For us there can be no luxury of dreaming of tomorrow's technical advances or revolutionary concepts.

A "promissory" missile, plane or radar is no help. The bell could ring at any time. The balloon could be ascending as I write this. We must, of course,

be ready to assimilate and make best use of whatever is new and better as it comes to us.

What We Have—Today's Navy

But above all we must be *ready to go, go, go*—right now, with what we have in hand.

- Our attack carrier force must be instantly ready for the holocaust of all-out nuclear war.

- Our amphibious force must be ready to evacuate Americans from whatever quarter a call may come, and as soon as it comes.

- The whole Fleet must be ready for the steady erosion of a limited war.

- We must be ready for the many, varied and exhausting demands of cold war. We must, in fact, be ready for the whole gamut of jobs which a well-balanced Fleet, and only a Fleet, is so admirably and exclusively able to do. Not tomorrow—Right now!

The Navy of the future will always be on a drawing board. But wars are fought by forces in being. Wars are lost by forces that are not ready. The Sixth Fleet is a ready Fleet and it is a Fleet that has come to stay.

THE SEVENTH FLEET

The major trouble-shooting force in the Pacific area, operating within close range of Japan, Korea and Taiwan, is the Seventh Fleet. Vice Admiral Wallace M. Beakley, USN, Commander Seventh Fleet, says:

READINESS" has become a household term in the Seventh Fleet. It's a comprehensive word that denotes a condition, and we find its influence deeply interwoven in all respects of Seventh Fleet operations.

"Readiness" means different things to different people. Basically, it is achieved through gaining and applying sound basic knowledge—plus good equipment, acceptable skills, consistent training, sound planning and, above all, the proper state of mind of men.

The Seventh Fleet has to be ready to take on all the assignments that are required to accomplish its mission, and be able to perform them at ANY time.

At All Levels

- Readiness to a Seventh Fleet destroyer captain should mean the establishment of those conditions within himself, his officers, men and ship which will enable him to meet consistently and perform satisfactorily all operational tasks which his seniors may call upon him to perform or which his own initiative may demand that he do.



VADM Beakley

- Readiness to the ensign who is a deck officer on board an MSO should mean the establishment of those conditions within himself, his men and ship which will allow him to perform successfully any deck duties as may be assigned him.

- Readiness, to the second class engineman on watch on board one of our CVAs, should mean the ability for him to set a condition of readiness within himself, his subordinates or equipment, so as to complete satisfactorily any requirements placed on him.

The above examples, although few in number, serve to point out that over-all readiness to be successful *must be achieved at all levels*.

With world conditions as they are today, the need for readiness is obvious. There is no easy road or simple short cut that I know of to achieve a ready Fleet, ready ship, ready officer or ready sailor. It takes hard work, training, skillful planning, and most important, a healthy outlook in our minds and in our hearts. That's our job, and we'll do it from seaman to admiral and from the smallest minesweeper to the biggest flattop.



... On the Job: the New Navyman

The Navyman operating the equipment, manning the ship, flying the plane—the Navy-trained and educated sailor—is the subject of this report, by Vice Admiral James L. Holloway, Jr., USN, Chief of Naval Personnel and DCNO (Personnel and Reserve).

TRADITION, VALOR AND VICTORY—the Navy's heritage from the past—are terms related to the actions of people. It is the *people* of the sea service who have made our Navy great.



VADM Holloway

The real measure of the power of the Navy is in its trained manpower. Ever since John Paul Jones went aboard the flagship *Alfred* and started to train her crew, the Navy has recognized the value of training.

The Technological Sailor

We can point with pride to the following examples of personnel training and education where our Navy has led the way:

- *Nautilus* was the world's first successful nuclear powered ship. It has now far outstripped Jules Verne's legendary "Nautilus" which in his imagination steamed 20,000 leagues under the sea. The real life feat was accomplished by the ingenuity, vision and hard work of *educated* and *trained* men of our Navy.

- From the time a man enlists in the Navy, on through his career, he has the opportunity to train as a specialist. He operates and maintains the vehicles of technological warfare. He deserves and he gets the best technical and scientific training given anywhere to anybody. He can train in one of the following fields (to mention just a few): electronics, nuclear propulsion, radio and radar, guided missiles, engines, aviation, cryptography or communications.

- Our enlisted technical schools and training methods rate with the best in the country. Civilian educators have borrowed techniques designed by us and the Navy in turn has adopted their methods for our use when they best suit our purposes.

One difficulty we do have—we train our men so well that they are in great demand by American industry. We regret their loss—for we need them badly—but our loss is, in this instance, the country's gain.

- Our place in the forefront in training enlisted men is illustrated by the Navy Enlisted Advanced School Program (NEASP). This program provides carefully selected petty officers four years of engineering education in two of the nation's finest engineering schools. This program is based on a new philosophy. Technicians who have learned to work with their hands are taught the engineering theories necessary to a full understanding of the complex electronic, missilery, and communications devices that are now arriving in our ships.

Education Up Through the Ranks

These enlisted training programs are representative of just a portion of the over-all training available. For officers, here are some additional examples:

- Midshipmen at the Naval Academy study a four-year curriculum which totals 156 semester hours. This is about 30 more than colleges usually require for a bachelor's degree. One-half of the 156 semester hours are in sciences, mathematics and engineering studies.

- Through the NROTC program, the Navy has been subsidizing college educations since 1946. In this program, also, the Navy has long emphasized scientific and engineering studies. Mathematics and physics are required courses. About 50 per cent of our NROTC graduates are engineers.

- For officers of scientific promise, the Navy provides postgraduate courses in the most prominent civilian educational institutions and in the Naval Postgraduate School at Monterey, California. This latter school rates with the best engineering colleges in the United States. It is the only service-operated school in the country authorized by law to grant degrees for engineering studies up to and including the doctorate.

Take Your Pick

The scope of the Navy's technological education effort is well understood by a listing of the areas in which courses are offered: Engineering (Aerological, Aeronautical, Electrical, Electronics, Mechanical, Hydrographic, Advanced Nuclear, Ordnance, Petroleum). Nuclear Reactor Technology, Mine Warfare, Naval Construction and Engineering, Oceanography, Operations Analysis, Advanced Science, Advanced Mathematics and Technical Science.

It is a major responsibility of the Navy to see to it that our personnel are properly educated and trained for the nucleonic age. Never have our opportunities and our responsibilities been greater.



THE TECHNOLOGICALS

THINGS HAVE CHANGED in the U. S. Navy since the frigates *uss Constitution* and *United States* sailed rail to rail with a budding fleet of steam warships, and since sailors stormed ashore to occupy Mexican California in the name of the American government.

Officers no longer bathe in dishpans nor do sailors sleep in hammocks, and today "going aloft" means painting the mast or fixing the radar gear.

Just as the appearance of automobiles and the design of their engines have changed over the years

of the builder of America's first steamboat.

Many old-time Navymen, however, could not picture steam-powered machinery replacing wind and canvas. Even after she proved herself practical, *Fulton* was later equipped with sails by leaders of the old school and was not very active during her short career. In 1841 the Navy launched *uss Mississippi*, our first ocean-going steam-driven capital ship.

From Sails to Steam

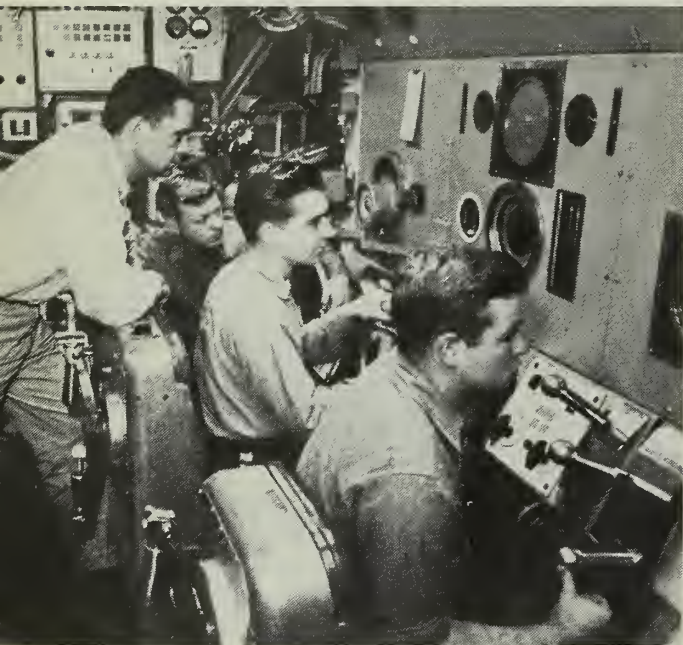
Through the efforts of far-seeing men like Commodore Matthew Cal-

years from the unlocking of the atom to nuclear power.

A Few Decades Back

Just in the past 40 years, the changes have been many. They include the advent and improvement of radio, of underwater sound, radar, the phonetic alphabet, and the brand new Navy of electronics, supersonics and nucleonics. But always, there was the constant changing, establishing and disestablishing and combination of rates to keep pace with the evolution of a modern Navy.

These changes within the rating structure are necessary because no



Nuclear Power



Fire Power

so, too, has the Navy changed. Even though some changes came about rapidly, they appeared easy because you adapted yourself to them as a matter of daily routine—as easily as going to the Navy Exchange or ship's store and buying a new item that you've read or heard about.

The first mine, the first torpedo, the first plane and many other "firsts" all established a new era in the Navy.

If you were asked to pinpoint the greatest advance in the Navy, the chances are that your answer would be the conversion to steam. Shortly after the War of 1812, the Navy launched *Demologos*. She was our first warship to use steam and was later rechristened *Fulton* in honor

braith Perry, usn, the Navy was becoming more steam-conscious. Perry, who is referred to as the "Father of the Steam Navy," had been enthusiastic about the possibilities of steam while in charge of construction and in command of the Navy's second steam frigate *Fulton II*. Steam was now hailed as the most important naval development since the cannon.

This steam era brought along many new changes that were swept up and carried ahead on the crest of modernization. And these changes, moving slowly at first, quickly gathered speed. It has been said that it took 400 years for navies to shift from spears to gunpowder, 75 years from sail to steam, but less than 12

matter how much new machinery or equipment is brought into play, it still takes men to man them. And the work of the scientist has no significance if the men of the Navy do not know how to operate or care for the equipment developed by the scientist.

During the period 1921-1925, the ratings of *Landsman*, *Oiler*, *Plumber* and *Fitter*, *Sailmaker's Mate*, *Seaman Gunner* and *Special Mechanic* went out the nearest port. When these ratings were disestablished, the Navy had its eye to the future by bringing in the ratings of *Aviation Pilot* and *Torpedoman*. Many other ratings were to receive the same treatment in the years to follow.

Between 1925-1939, *Aviation Rig-*

SAILOR

gers became *Aviation Machinist's Mates*, *Blacksmiths* became *Metalsmiths*, *Buglemasters* disappeared until 1947 when they were incorporated into the Quartermaster rating, and the duties of *Coppersmith* were absorbed by *Metalsmiths*. The birth of the *Aviation Machinist's Mate* came into being along with *Aviation Ordnanceman*.

Yesterday's Navy

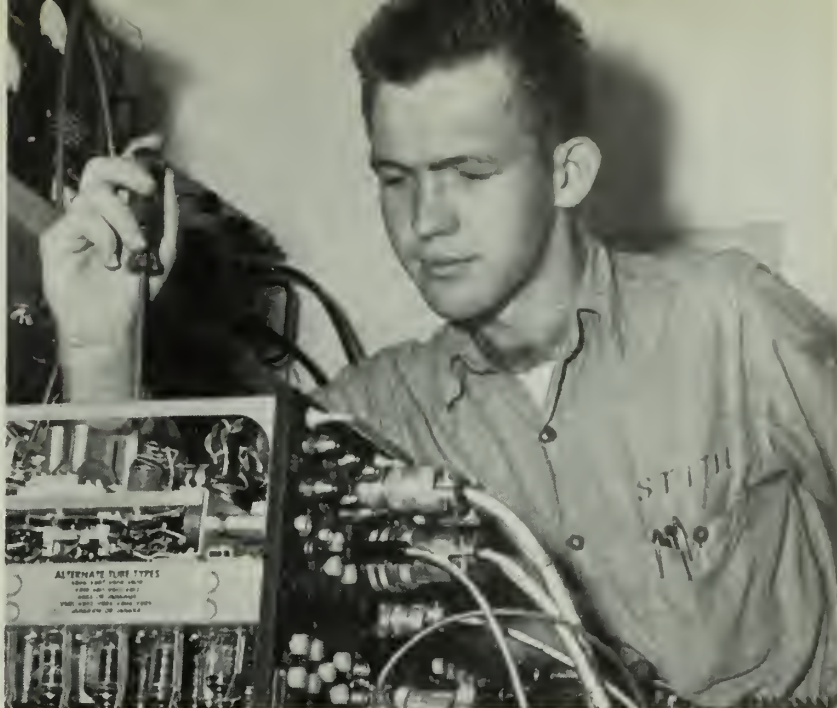
The rating structures have changed and rechanged, some were discontinued while others were absorbed or newer ratings established. The eye was always to the future and what was going to happen beyond the future.

But somehow it just doesn't seem fair to leap into the future without taking a nostalgic glance into the past to see what made this Navy what it is today. Some men in the Navy today watch a rapid-fire 5-inch gun blaze away and that's all they see. Others can look at this same gun and see the conglomeration of ship's cooks, boatswain's mates and seamen operating a manually controlled 4-inch gun on the heaving bow of an old four-stacker. The crew is a little tense, waiting for the command to fire and when it does come, accompanied by the buzzer, the trigger is squeezed—and nothing happens. Another squeeze and another until someone yells, "Kick it off!" He must have, because there's the loud report followed by a cloud of black smoke which curls its way over the bridge. Maybe the shell would splash a hundred yards from the ship or go off into the void of limitless space. Or possibly it would glance off the water and skip into the target and a great cheer would go up from the crew.

If it hadn't been for these men and others before and after them, the Navy wouldn't have accumulated the knowledge with which to build the weapons of today.

Before and After Radar

Some "marvels" of their time are taken for granted today. One of these would be radar. Before it came along, the art of stationkeeping in maneuvers and convoy was a very intricate and hazardous problem. In 1937, a 200-mc radar was tested at sea on *uss Leary* (DD 158). Two years later, aboard *uss New York*



Electronic Power

(BB 34) while she was in a Fleet problem in the Caribbean at night, a greatly improved 200-mc was undergoing another test.

A group of destroyers (without radar) were attempting a torpedo run on the line of battleships. All ships were in darkness. A group of men in Air Plot on the battleship were peering intently at a small fluorescent screen when a slightly higher hump appeared in the jagged green line wavering across the screen. They let the "hump" come to 5000 yards, trained a searchlight in the direction of where the hump was coming from, illuminated and picked off the oncoming destroyer.

Radar had come to life.

Upon the shoulders of radiomen fell the brunt of keeping up sound and radar equipment. Operators of this equipment (*Soundmen* and *Radar Operators*, then) were usually, *Yeomen*, *Storekeepers*, or *Seamen* who, if they could distinguish between a "ping" and a "pong," were awarded five dollars extra a month. Communications increased and Radiomen couldn't be spared to keep up extra equipment. So, in 1943, there were established two more ratings: *Radarman* and *Sonarman*.

With the rapid changes taking place in these modern times, there is hardly a rating in the Navy that is not, in some way or another, closely connected with either the

Yesterday's Power





CHANGING RATINGS—Navy, in pace with the times has changed its rating system, dropping outdated ones and adding ones such as guided missileman.

operation or maintenance of nuclear, supersonic and electronic devices which have started to change the face of the Navy.

Modern combatant ships, even without atomic power or guided missiles, are exceedingly intricate. They represent the most complicated electronic equipment and machinery ever assembled by man in a small place.

How It Was on a Four-Stacker

To get some idea of how new types of equipment replace the old, and to appreciate the advancements made in the electronics installation in a Fleet destroyer, it is only necessary to go back a quarter of a century and live again the "good old days" in a U. S. Navy four-stack tin can.

To carry out its mission, the de-

stroyer of 25 years ago had a very small electronics installation consisting primarily of three basic types: radio, sound listening devices, and a direction finder.

The radio room, which was located on the main deck immediately below the bridge, was approximately eight by ten feet. Installed in this room were the transmitters and receivers with room for three operators.

The standard installation consisted of a model TU series transmitter for low-frequency coverage. Because destroyers of that era had no need for a high-frequency transmitter, none was installed.

The TAD transmitter covered a frequency band from 2000 to 3000 kilocycles and had two electron tubes with a rated output of 100

watts. The TAD was, by its nature, a short-range medium-frequency transmitter used primarily for division or squadron communications during tactical maneuvering and for routine traffic when in port. It had a vertical wire antenna about 40 feet long.

Microphonic—With Peanuts

Three receivers were provided on those ships—models RE, RF, and RG, with a combined frequency coverage of 10 kilocycles to 20,000 kilocycles. The old-timers will well remember these receivers for their wonderful "microphonic" response when they were tapped with a finger or hand, or while an operator was trying to copy a weak signal with a typewriter. The receivers had the "peanut" type of electron tubes, which were battery-operated, with two volts on the filament and 45 volts on the plate.

The direction finder was a standard low-frequency receiver with some added refinements. It had a rotating loop antenna mounted atop the after deckhouse. It was used to determine the bearing of a received signal within the frequency range of the receiver.

The sound installation on a destroyer in 1930 was very limited, consisting of several hull-mounted hydrophones on the port and starboard sides. The hydrophones were connected to a receiving device in the ship so a good operator could obtain approximate bearings of contacts. In the early thirties an underwater telegraph communication system was developed and installed.

All this equipment contained a total of 30 vacuum tubes and had two transmitting antennas and three receiving antennas.

Electronic Installation—\$30,000

The total cost of the electronic installation in a four-stack destroyer was about \$30,000. The cost to install was approximately \$7000. These figures, it must be remembered, were the going price during the days of the depression.

To maintain and operate the equipment on a typical 1930 destroyer, the ship was allowed, and usually had on board, a *Chief Radioman*, one *Radioman first*, *second*, and *third class*, and a *striker*.

The chief, who was usually the material man, was charged with the maintenance and upkeep of the equipment. He was assisted in this

MOST IN YESTERDAY'S SHIPS—USS *Constitution* was pride of the Navy and sea before steam power and steel hulls replaced wooden sailing vessels.



job by the first class. The second and third class radiomen and the striker usually stood the operator watches except when more than one watch stander was required.

Maintenance was minor and consisted primarily of battery charging, tube changing and occasional receiver repair. Once in a great while there was transmitter or motor generator repair.

New Look in Transmitters

In the mid-thirties the Navy acquired the first new destroyers built in about 15 years. These destroyers incorporated many improvements over the four-pipers in tonnage, hull length, beam, topside outline, engines, ordnance and electronics.

Each ship had a low-frequency transmitter model TAJ (covering a range from 175 to 600 kilocycles); a medium-frequency/high-frequency transmitter (covering 2000 to 18,000 kilocycles); a low-frequency receiver model RAA (covering 10 kilocycles to 1000 kilocycles in five bands); and a medium-frequency/high-frequency receiver model RAD (covering 1000 kilocycles to 30,000 kilocycles in eight bands).

The RAA and RAB models were the first "superheterodyne" receivers installed in destroyers. Operated from the ship's powerline, they eliminated the need for batteries.

Sonar Comes Aboard

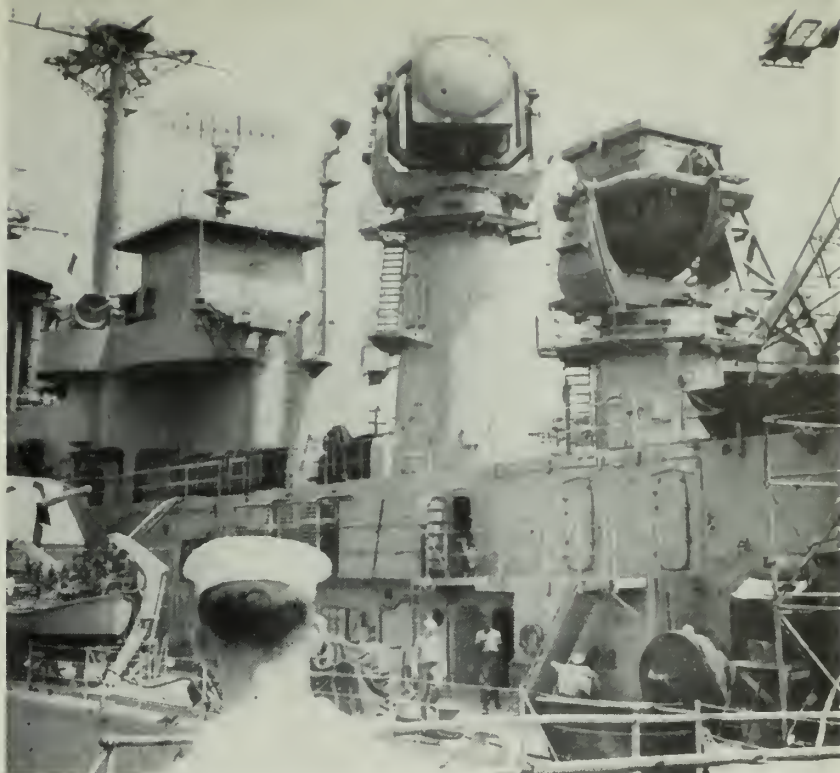
In addition to the radio transmitters and receivers, each ship had a low-frequency direction finder and an improved underwater sound installation. For the first time, *sonar* equipment with echo-ranging capabilities was installed in destroyers. The first of these units was designated model QC.

The QC equipment, plus later models, was a mainstay of U. S. antisubmarine warfare all through World War II. Many refinements and some improvements in presentation of information, such as the bearing deviation indicator (BDI), were installed in the Fleet as rapidly as they were produced.

And Then—Radar

When World War II began, and as equipment became available, destroyers and other Fleet units were outfitted with a new development in electronics—*radar*. The first types of radar to be installed on destroyers were the SC series air search radar, and the FD (later designated Mark 4) fire control radar.

Before the close of World War II,



INSTEAD OF SAILS ships' masts now support vast networks of radar antenna. Here, sailor eyes king-size missile guidance radar on USS Canberra (CAG 2).

many other new techniques appeared in destroyers and in other types of ships. An electronic method of identification was introduced in which the principles of radar were used.

The cost of the electronics installation (not including that of fire control radars) on a *Fletcher*-class type of destroyer at the end of World War II was about \$150,000. The cost to install the equipment was about \$50,000. The total number of electron tubes in a typical installation was many times the number contained in a four-stack destroyer; the two radars alone had more than 100 tubes.

At that time, the number of tech-

nicians allowed and on board had not been increased in proportion to the increase in quantity and complexity of equipment. Many destroyers had on board only one or two qualified technicians to maintain all of the electronic equipment, including the fire control radars.

It's Electronics All Over

From the close of World War II until the present, the Bureau of Ships has been constantly striving to place the latest types of electronic equipment in destroyers. Improvements have been made in all fields of the art.

In addition to the improved *air* and *surface search radar facilities*, a third type of radar has been in-

MOST IN TODAY'S SHIPS—USS *Saratoga* (CVA 60) and her super carrier sisters form quite a contrast when compared to the 'big' ships of past years.





ONE OF THE MANY uses of radar and radio at sea today is shown as an air controlman talks down an unseen aircraft, trying to land with zero visibility.

stalled in certain destroyer types. It is referred to as a *height-finding radar* and is used almost exclusively in anti-aircraft defense.

However, in case of a failure of the conventional air search radar, the height-finding radar can be used for that purpose and still continue to function as a height-finder. This radar determines the range, bearing, and height of any aircraft from which it receives an echo. It has a high-power radio-frequency output and provides reliable long-range capabilities.

New and greatly improved meth-

ods of electronic identification have been incorporated into the electronics installation in destroyers. They function in a manner similar to their predecessors but have many refinements and advantages.

Great strides have been made in electronic countermeasures, and the very latest of these equipments are installed in our Fleet destroyers. Enemy electronic transmissions of practically any type can be intercepted and analyzed without the enemy becoming aware that he has been detected. Further, through special circuits and antennas, his

bearings and range from the intercepting ship can be determined.

Electronics Under Water

Perhaps the greatest strides in destroyer electronic installations have been made in the underwater field—principally since one of the primary missions of a destroyer is antisubmarine warfare.

Other important improvements have been made in the communications field on a new Fleet destroyer. An example is the DD-931 class. In these ships, the class allowance consists of four MF/HF (medium-frequency, high-frequency) transmitters, with power output and coverage adequate to meet the requirements of present-day communications.

In addition to the MF/HF transmitters, the ship has a large number of manually and automatically operated ultra-high-frequency transmitters. Two very high-frequency transmitters will eventually be replaced with UHF equipment.

To connect the transmitters and receivers properly many transmitter and receiver switchboards have been installed in the main radio room, in the combat information center, and in auxiliary radio. This arrangement gives maximum flexibility of use of the equipment from any space on the ship that has the necessary remote control facilities. Some spaces that are so equipped are the pilot-house, the open bridge, underwater battery plot, and, of course, radio central and CIC.

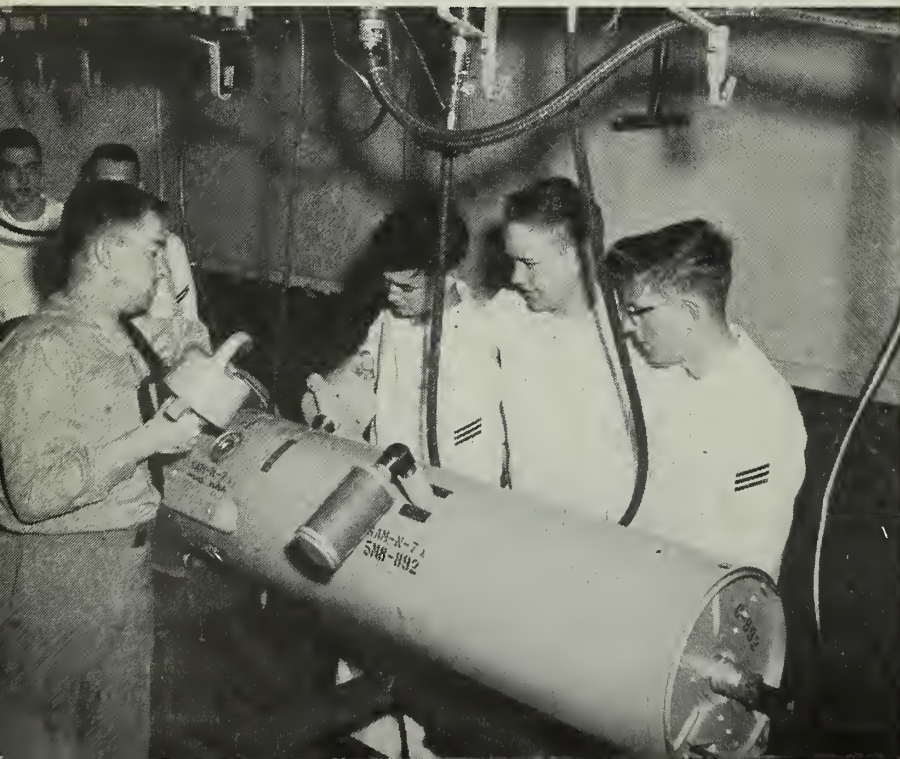
Teletypewriters Too

The modern destroyer also has three teletypewriters and associated terminal equipment providing for transmission and reception of printed page messages at 60 words a minute. The teletypewriters are in radio central and CIC.

The space required to install the radio communication equipment in a DD-931-class destroyer is about 300 square feet, not including that required at the remote operating positions nor for all the bulkhead-mounted components. Large though this may seem to the old destroyer man, the "shack" is still cramped for space. Without miniaturization and compactness, the space requirements would be absolutely prohibitive on this type of ship.

However, reduction in size by miniaturization techniques has placed an almost unbearable burden on the technical force of the ships. No longer is it possible to make repairs

MISSILE CLASS—Navy training has had to change with men and ships. Here, Navy students learn about guided missiles at school in Dam Neck, Virginia.



and test the receivers and transmitters with a "pair of gas pliers" and a "borrowed multimeter."

The total cost of the electronics equipment (not including fire control) on a DD-931-class destroyer is about \$700,000 and the cost of installation \$355,000.

From 30 to 400 Tubes

To illustrate the increase in the maintenance load, the number of electron tubes used today can be compared with a World War II destroyer, and, even farther back, the old four-pipers. The complete electronic installation on the DD-931 class takes approximately 4000 electron tubes and the circuits necessary to operate with them. When the 4000 tubes are compared with the 30 on the old destroyers and with about 250 on the World War II destroyers, the increase in maintenance is readily apparent.

The technical force allowed for the DD-931 class is a *Chief Electronics Technician*, three lower ratings, and possibly a striker. These three, or possibly four, men are responsible not only for keeping all the installed equipment operating, but for the proper use and maintenance of some 40 pieces of extremely complicated test equipment.

Electronic, Supersonic, Nucleonic

We've been using the electronic changes that have taken place in destroyers as just one example. This illustration points up one small part of the many changes occurring throughout the Fleet that go into the make-up of changing the face of the Navy.

The past 10 years have been marked by an almost explosive development of technically complex weapons for the Navy—guided missiles, supersonic aircraft, complex electronics, atomic weapons as well as nuclear propulsion.

Atomic powered ships operating with the Navy today are *uss Nautilus*, SS(N) 571, and *Seawolf*, SS(N) 575. Other elements of the Fleet now in the supersonic age are being equipped with the missiles *Talos*, *Sidewinder*, *Sparrow*, *Terrier* and *Polaris*.

The future shows that more nuclear-powered ships are in the works; some on the drawing boards, some off; still others are on the ways. Commissioned in December was *uss Skate*, SS(N) 578. Appropriations have been approved for the construction of four more atomic-



OLD SCHOOL—Classes like this 1903 instruction session in wireless telegraphy paved the way for the unbelievable electronic gear used by the Fleet today.

powered submarines in the fiscal 1958 program. Three of these will combine advantages of nuclear power with missile armament. The fourth will incorporate a promising nuclear power plant of new design.

The appropriation also covers the building of an 85,000-ton attack carrier, CVA(N) 65. It will be powered by eight nuclear reactors, and equipped with the latest jet aircraft, electronics devices, and missile ordnance. The use of nuclear fuel will give a cruising range many times that of the World War II *Essex* carrier or a cruising range

equal to many trips around the world, non-stop and non-refueled.

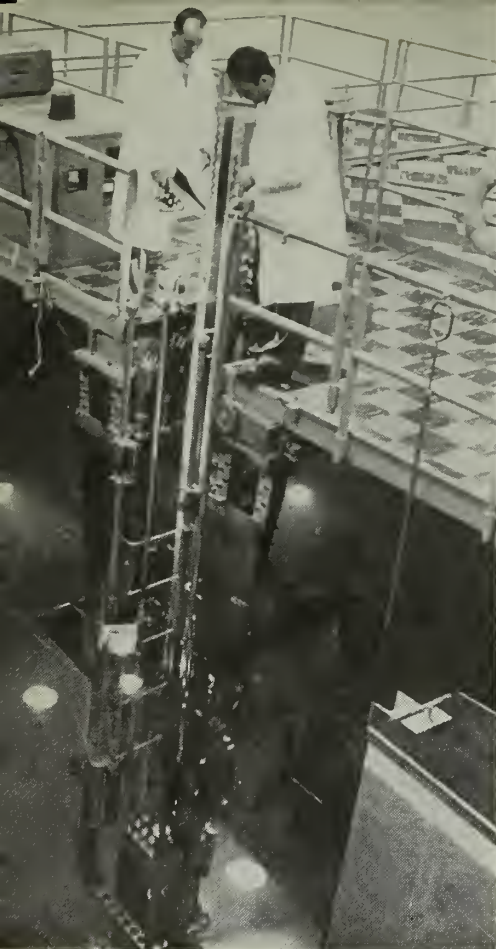
In this new Navy you're in fast company whether or not you want to be. The words you are picking up, such as satellite, guided missile and nuclear power, roll over your tongue as easily now as terms used by old-timers in sailing days.

They say that they were the real sailors, those old-timers. Sure they were—at that time and in their Navy. Now it's your Navy. It's all new and it's going to continue to be new—from now on.

—Thomas Wholey, JOC, USN

ON THE SLEEVE of Navymen today appear rating badges that would seem tall tales to old men of the sea such as sailmaker's mate and blacksmith.





NAVY'S HELPING HANDS have contributed to society, scientific research, disaster aid, and good will abroad.

NAVY ON THE GO

THERE WAS A HAPPY hum in the sound of the engines of USS *George* (DE 697). Behind her the wake tumbled and danced to the tune and everywhere on board there was a good feeling in the air.

George was headed home. In less than three days she'd be back in San Diego, Calif., U. S. A., after a six-month, 37,000-mile cruise in the Western Pacific. The married men in her crew were anticipating that moment when their wives and children would be standing on the pier, smiling and waving and squealing, "There he is!" And the unmarried ones were making big plans for Stateside leave and liberty.

On the Swedish motor ship *Kirribilli*, just 45 miles away, the atmosphere was much different. Rolf A. Berglund, from Ockblo, Sweden, was seriously ill and the ship's radio operator was signaling for help to get the young engineer's apprentice to a hospital.

George heard *Kirribilli's* plea. Altering her homeward course, she steamed for a rendezvous with the

Swedish vessel. Her crew temporarily set aside homecoming plans when the word was passed that a man's life might depend upon *George's* efforts to help him. No one had ever heard of the man, but that made no difference.

Around midnight, when the two ships met, *George's* motor whaleboat was lowered into the black choppy sea. Within 15 minutes the patient was on board the DE, under the care of Chief Hospital Corpsman A. C. Schivonne, and the American warship resumed her course.

Early the next morning a Coast Guard seaplane took over the last leg of the mission. Its pilot made a spectacular landing and miraculous takeoff in five- to seven-foot seas and safely evacuated the patient.

So what's so much about the fact that *George* gave a hand to a shipmate in distress? If you've been at sea at all, you've probably had your share in many a similar deal and never got your name in the papers. It's done every day.

That's the point. It is done every

day. A helicopter pickup here, a pint of blood there, an orphan's party in a foreign port, a tow for a disabled merchantman. As an isolated instance, none is enough to make history. But they mount up.

For nearly 200 years, the Navy has been offering a hand when and where it was needed. Yet in the history books, this "helping out" aspect of the Navy's contribution to society is often obscured by the magnitude of the Navy's accomplishments in war or the importance of its scientific research or its peacetime role as a deterrent to war and an instrument of good will.

Over the years the Navy's adherence to the tradition of helping out has led to some of its most valuable peacetime services — services which have paid off liberally in lives saved, suffering prevented and property preserved. For example, in recent peacetime emergencies the Navy has fought fires from the forests of California to the waterfronts of the East Coast, aided the victims of floods, torna-



PEACETIME Navy helps world in many ways. Medical aid is given at sea and U. S. Navymen fight fire on Italian ship.

— IN PEACETIME

does, hurricanes and earthquakes in the United States and several other countries; evacuated American civilians from Israel and Egypt during the Suez crisis; helped transport Hungarian refugees to freedom; and figured prominently in the rescue operations during the *Andrea Doria* disaster. In less spectacular emergencies the Navy has supplied electric power to communities left without it, aided civilian hospitals during polio epidemics, carried water to Bermuda and the Virgin Islands during water shortages and repeatedly participated in search and rescue operations to aid ships or planes in distress.

Again and again when disaster has struck the Navy has proved that the training, courage and efficiency which win battles in wartime are just as important in peacetime emergencies. For instance, take what the Navy did at San Francisco, Calif., way back on 18 Apr 1906. Early that morning crewmen of the destroyers, *uss Perry* and *Preble*, berthed at the Mare Island Navy

Yard, Vallejo, Calif., were awakened by a severe rolling and pitching of their ships. A short time later they found out what had caused it:

"EARTHQUAKE AT 5:24 A.M., SAN FRANCISCO. NEARLY DEMOLISHED CITY . . . CITY FIRE DEPARTMENT HELPLESS . . . CITY IS IN FLAMES."

As billows of black smoke climbed into the sky above the ruined city, *Perry* and *Preble* raced down the bay. Damage appeared greatest south of Market Street, but the fire, out of control because the water lines had been broken by the quake, was steadily progressing toward the waterfront.

Some of the piers had collapsed, so *Preble* anchored at the foot of Howard Street, where she was put to use as a hospital ship.

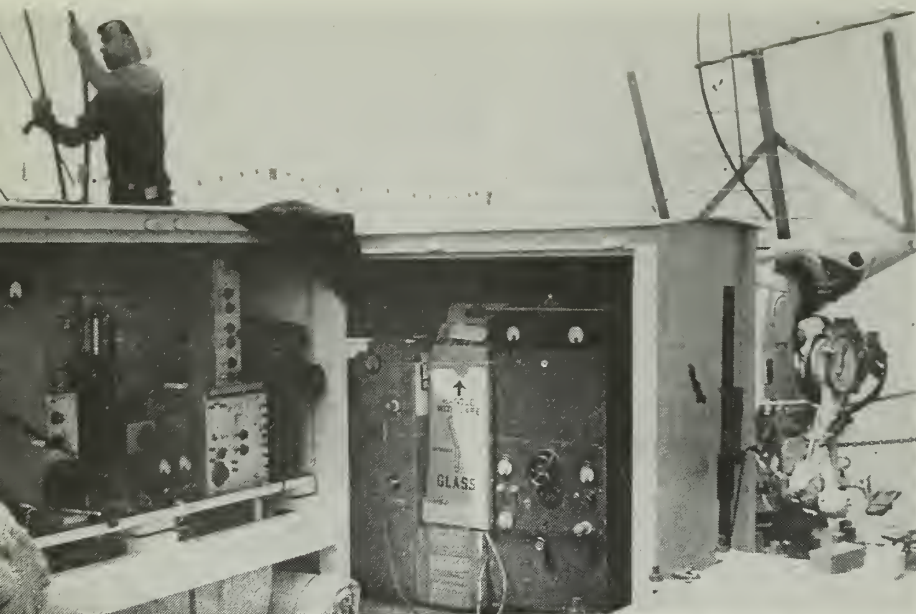
Meanwhile, *Perry's* crew and city firemen set to work laying out lengths of hose, some of which reached as far as 11 blocks into the battered, burning city. Before long, however, many of the civilian firemen and policemen disappeared to

look after their own families. This left the Navy with the dual responsibility of fighting the fire and enforcing the law. So, the sailors from *Perry* and two local tugs, plus a detachment of Marines from Mare Island, stubbornly fought to control not only the blaze, but also the lawless elements who were taking advantage of the confusion to loot stores, warehouses and homes.

For four sleepless days and nights the Navymen shifted hoses, sprayed and dynamited buildings, rescued the living and brought out the bodies of the dead. Largely through their efforts, much of the waterfront was saved.

Of course, it doesn't take an earthquake to bring the Navy to someone's aid, for besides assistance in emergencies there are many other ways in which the Navy tradition of helping out is demonstrated.

Right now, through its participation in the International Geophysical Year program, the Navy is helping scientists to get a better understanding of the planet we live on and the



THROUGH THE YEARS Navy scientists have helped in development of modern 'miracles' such as now widely used radar. Here, radar is tested on ship in 1937.

space which surrounds it. As part of a world-wide cooperative effort, military and civilian scientists are gathering information that may lead to advances in navigation, radio communications, long-range weather forecasting, the utilization of the plant, animal and mineral wealth of the sea and, perhaps, even to eventual space travel. Also, among the Navy's services in the IGY program, is Operation Deep Freeze, one of many Navy contributions to man's efforts to explore the unknown reaches of the earth.

The IGY program is just one example of how the work of Navy

scientists and the tradition of helping out may benefit many people. There are lots of others, for although Navy research is devoted primarily to fitting the Navy for war, new devices and techniques developed for war or for the good of the Navyman often prove valuable in peacetime civilian use as well.

Pioneering Navy scientists back in the early 1920s, for example, played a big part in the efforts (in this country and abroad) which resulted in radar. At first it was looked upon mainly as a device for detecting enemy planes. However, during World War II radar proved to be

much more than that, and today in civilian use it's helping to make travel safer on land, at sea and in the air. On land, highway patrols are using it to crack down on speeders. At sea, merchant ships use it in navigation. And, in commercial aviation it's used in navigation, to control bad-weather landings and in many other ways.

In radio too the Navy has pioneered in developments which have had important peacetime applications. The world's first shore-to-ship radio conversation originated via the U. S. Naval Radio Station, Arlington, Va., in 1915. The same year, the first transoceanic radiotelephone system was set up between that station and the Eiffel Tower in Paris.

Another typical case of Navy research benefiting people outside the Navy is that of the Waterbury high-speed gear. Originally developed by the Bureau of Ordnance for use in training and elevating guns, it is now used in punch presses, motion picture machines, steering gears and textile printing presses.

The list could go on and on. In meteorology, the Navy has helped develop the use of electronic computers in figuring out weather forecasts and is making important contributions to the study of hurricanes. And, in dentistry, aviation, maritime safety, refrigeration and many other fields the Navy has also produced advances which have important peaceful applications.

Besides the advances brought about through Navy research and the assistance the Navy has rendered

BETTER UNDERSTANDING of the U. S. and its way of life is passed on by Sixth Fleet band during concert in Algiers.



ered in peacetime emergencies, there are still other ways in which the tradition of helping out benefits people outside the Navy.

The work of the Naval Weather Service, done in close cooperation with the other armed forces and the U. S. Weather Bureau, is an illustration of that. For example, here are some of the jobs it does:

As part of the Joint Hurricane Warning Service, Navy "hurricane hunters" help the Weather Bureau to spot and keep track of hurricanes so that warnings can be issued to people in the areas where the storms are likely to hit.

Weather observations from the Fleet and overseas stations are passed on to the Weather Bureau for use in mapping the weather situation for the whole Northern Hemisphere.

Stations of the Naval Weather Service overseas furnish information to the weather bureaus of the countries in which they are located.

Navy funds support the operations of the Coast Guard's ocean station weather ships.

And, through the Weather Bureau, data gathered by Navy meteorologists is exchanged with other nations which are members of the UN-affiliated World Meteorological Organization.

Two of the oldest examples of Navy activities which are part of the tradition of helping out are the Navy Hydrographic Office and the U. S. Naval Observatory, which have been doing business for more than a century. The Hydrographic Office, through its charts, publications and other services, has aided navigators from the early days of steam to the air age. The Observatory, through its compilation of celestial data, also provides valuable assistance to the air or ocean navigator and the astronomer. In addition, its Time Service, which sets the official correct time for the nation, is useful in navigation, surveying, map-making, radio, seismology and watchmaking.

Now separate activities under the Office of the Chief of Naval Operations, both the Hydrographic Office and the Naval Observatory had their origins in the old Depot of Charts and Instruments, which was established in 1830 and headed for some time by CDR Matthew Fontaine Maury. Maury, "the Pathfinder of the Seas," earned world-wide fame



NAVY WEATHERMEN are constantly funneling valuable information to civilian sources throughout the world. Here, icebergs are recorded for use of mariners.

as a living example of the tradition of helping out.

When he was in his early 40s the Navy Department appointed him superintendent of the Depot of Charts and Instruments, where he began collating the navigational data found in stacks of old log books stored in the Navy Department. He supplemented this information with observations made several times daily by ships in our Navy and by American and foreign merchant ships. Soon, more than 1000 shipmasters in every ocean were making observations according to a uniform plan.

The temperature of air and water, direction of wind, set of currents and height of barometer were recorded. Navigators were instructed to cast overboard (at stated periods) bottles containing a record of ship's latitude, longitude and date. They were also asked to pick up similar bottles

wherever they found them, noting the exact position and time and forwarding the information to Washington.

On the basis of this information, Maury drew important conclusions about winds and currents, paths of storms, quickest routes between great shipping ports and other fundamentals of modern navigation. To this day, Maury's pilot charts, brought up to date, are indispensable in making ocean travel safe and expeditious. His studies of the little-known Gulf Stream, then termed the "river in the ocean," provided science with much valuable data on that phenomenon.

And the laying of the first telegraph cable from Europe to America was made possible largely because of information which Maury had collected.

As Maury once wrote: "Navies are not all for war." — Jerry Wolff.

THIS WAY OUT—Navy has been on hand many times to evacuate refugees. Below: Baggage of American refugees during Egyptian conflict is sorted.





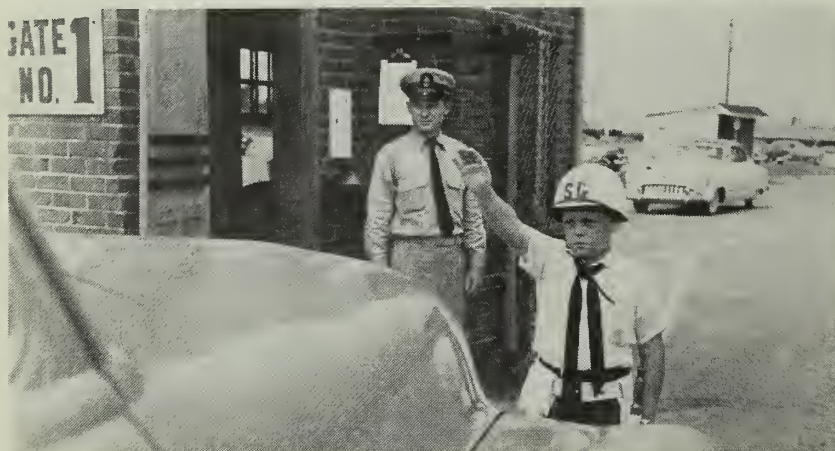
SHE WAS THERE when the first line went over (above left). Right: 'Permission to come aboard for duty, Sir.' Below: Guard duty is a thankless job.



Small Fry

"WHAT WOULD YOU LIKE to be when you grow up?" That's one question you probably wouldn't have to ask these youngsters. From the looks of the pictures, they are, at least for the present, ready to play the role of sailor (or Wave).

The idea of becoming a "salt" is a natural for many of the "small fry" pictured on these pages inasmuch as a good percentage of them are emulating their daddies rather than exercising their fantasies. But don't let's sell the imagination of our young friends short. Come to think of it, the



'NOW HERE is what the Navy has to offer you.' Right: It sure is good to be back with the family once again.



ALL HANDS

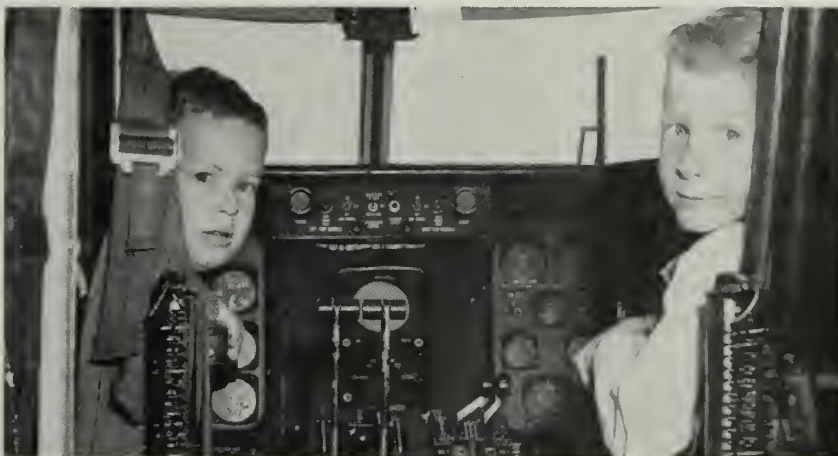


'DIDN'T WE serve together on board the *Tuscarora*?' Above right: It's Saturday night at the EM club. Below: 'Are you ready for take-off, Chief?'

In Uniform

romance attached to the mariner, sooner or later, consciously or subconsciously, catches the fancies of both juniors and seniors alike. That's when you see Johnny (and Janie) appearing in sea-going outfits, as on these pages.

There has probably been a "Midget Navy" as long as men have taken to traveling over the seas and, whether or not children belong to Navy families, the game of imitating sailors holds the same fascination for them as imitating cowboys, cops or space men holds for other youngsters.



'OUT OF UNIFORM? But the plan of the day said . . .' Right: Time for practical factors for signalman third class.



LETTERS TO THE EDITOR

Mare Island Can Do—and Did

SIR: Through an oversight, I'm sure, ALL HANDS failed to mention the outstanding accomplishments of the Mare Island Naval Shipyard at Vallejo, Calif., in the story entitled "Ship's Service By the Yard," which appeared in the October '57 Ships and Yards issue.

We at Mare Island are proud to boast that "Our Sole Mission is to Serve The Fleet." And, that we have done and will continue to do. Mare Island is one of America's—and perhaps the world's—largest shipbuilding and ship repairing plants.

During World War II, Mare Island Naval Shipyard repaired and returned to duty more than 1200 ships of all types. In addition, during this same period, 391 new ships—an entire Navy in itself—were constructed. They included five 18,000-ton submarine tenders, 19-Fleet-type submarines, 31 destroyer escorts and hundreds of landing craft and other smaller types of auxiliary craft.

Even as far back as WW I, Mare Island saw many records broken including the record building of the destroyer *Ward*, in 17 days.

Today, Mare Island continues to make history. In her buildingways are three

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

nuclear submarines, including *uss Halibut*, SSG(N) 587, the Navy's first nuclear-powered guided missile submarine; and *uss Sargo*, SS(N) 583, the Pacific Fleet's first atomic sub. Incidentally, *Sargo* was launched in October and is scheduled to join the Fleet next summer.—E. D. W.

• *The missions and accomplishments of the Mare Island Naval Shipyard are well known by the staff of ALL HANDS, as well as seafaring men throughout the world. Be assured that Mare Island's role was not left out of the Shipyard story in our October issue because of an oversight, but because of lack of space.*

We know, as most Navymen do, that Mare Island is one of the Pacific Fleet's key bases. It has been since 1854 when it became the home base for the Pacific

Letter from Loyal Subject of King Neptune

SIR: I need some help—and badly. Needless to say, it's to prevent a possible affront, if not to my person, at least to my dignity. (I like to stand on my dignity.)

The circumstances are as follows:

On 12 Oct 1950, when *uss Pirate* (AM 275) sank in the harbor of Wonsan, Korea, so did all proof of my having crossed the equator.

My ship is now getting underway for a South American cruise. If I can produce no evidence of my being a royal subject of King Neptune Rex (better known as a Royal Shellback), I'll be treated as an ordinary, slimy, untouchable (pardon the expression) pollywog.

I believe that no true and loyal Shellback should ever have to associate with such unmentionables. Trusting that you too are a loyal subject of King Neptune Rex, I implore you to initiate a search of my record and confirm my status.

In June 1945, I crossed the equator on board *uss Pickens* (APA 190). In January 1947, I crossed the equator on board *uss Onslow* (AVP 48). And

again, in February 1949, I crossed the equator while on board *uss Monongahela* (AO 42).

Sir, I beg you, please send me confirmation of at least one of these crossings as soon as possible. By doing so, you will prevent a most horrible miscarriage of justice and indignities to the posterior of a Royal Shellback.—F. M., RMC, USN.

• *Since yours was a hardship case, we checked your record, Chief, and found that your three crossings of the equator qualify you as a Shellback who has been initiated in the Solemn Mysteries of the Ancient Order of the Deep. We suggest you have your commanding officer sign a certificate to this effect.*

To any other Shellbacks with a like horrible fate looming in the future, we suggest that you send a request to the Chief of Naval Personnel (Attn: E3), Navy Department, Washington 25, D. C. DON'T write to ALL HANDS. And don't wait until that equator is just over the horizon either. Requests should be sent in at least six weeks before you expect you will need an answer.—ED.

Squadron which, at that time, consisted of 12 wooden ships.

Mare Island can look forward to a future as eventful and colorful as its past.—ED.

On the Right and Abreast

SIR: Once again the question concerning the proper interpretation of Section IX of the *Landing Party Manual* has arisen. Some of the local "authorities" contend that the platoon leader or company commander "leads" the senior inspecting officer down the ranks. In other words, he precedes the entire inspection party.

However, I feel that the platoon leader or company commander falls in to the right and one pace to the rear of the inspecting officer after he has rendered his salute and been inspected.

Paragraph 3-34 of the *Landing Party Manual* states.... "during the inspection of a Platoon or Company, its commander marches on the right of the inspecting officer." Shouldn't this read, "and one pace to the rear of the inspecting officer?" This is, of course, if the inspecting officer is moving along a line parallel to the ranks.—S. T. B., CDR, USNR.

• *The "Landing Party Manual" (Change 3, Sect IX, para 3-34) should be interpreted literally, and the company commander should march on the right and abreast of the inspecting officer. Therefore, he does not "lead" or "follow" the inspecting officer, but accompanies him.—ED.*

Minority Cruises and Retirement

SIR: In 1930 I enlisted for a minority cruise and was discharged three years later on my 21st birthday. At that time I reenlisted and in 1943, I was again discharged three months early for the convenience of the government.

I understand that for each of these enlistments I am credited with a full four years of service. If this is the case, how does it count toward retirement? ... V. J. H., LCDR., USN.

• *Sorry—since you are an officer, time not served does not count toward retirement. In the case of officers, retirement is based on actual time served that is creditable for pay purposes as recorded in the Navy Register.*

If you had not been commissioned, however, such time would count for retirement.

For enlisted personnel, a minority cruise counts as a full four-year enlist-

ment and an early discharge for the convenience of the government (within three months before expiration of enlistment) also counts as the full period of the enlistment, two, three, four or six years, as the case may be.—ED.

E-E-E-Etcetera

SIR: Have read with interest your Letters to the Editor in your October '57 issue, and I must commend *uss Ross* for also earning the "E" for Battle Efficiency. With all due modesty, however, I must admit that *uss Bausell* (DD 845) won the coveted "E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E" for fiscal '57, and I feel that we are also due proper recognition in ALL HANDS.

If I didn't write to tell you and the entire Navy about *Bausell*, I feel I would be letting down a crew, who certainly have never let me down.

All hands in *Bausell* are proud of the awards they won for fiscal 1957. They include: Destroyer Squadron One Battle Efficiency "E"—second award; Opera-



DUTY SECTION—Not having liberty doesn't seem to bother these whitehats on board *USS Jupiter* (AVS 8) as Danny White PN1, USN, sings a folk song.

First Machinist's Mate

SIR: I am interested in obtaining information on the rating structure as it was before WW II. Could you tell me if there was a rate designation for machinist's mate third class during the period 1940-41?—W. E. S.

• The machinist's mate third class rating was established 2 Mar 1926 and disestablished 1 Jul 1929. It was reestablished 12 Oct 1943 and is still in use today.

During the time the rate was disestablished, the lowest machinist's mate rating was second class. At that time, a fireman first class was in the same pay grade as a petty officer third class. His normal path of advancement was to machinist's mate, second class; water tender, second class or electrician's mate, third class.

When the rating of MM3 was reestablished in 1943, other third class artificer ratings also came into being. Among these were motor machinist's mate, watertender, boiler-maker and metalsmith. At that time, firemen first class could be changed to any of the new third class ratings or advanced (if qualified) to MM2c, WT2c or EM3c. And qualified firemen second class could be advanced to the new third class ratings. The same directive stopped advancements to fireman first class until this rating was changed to correspond to the pay scale of a seaman first class. On 1 Jan 1944 all firemen second class and firemen third class were changed to fireman first class and fireman second class respectively.—ED.

tions "E"; ASW "E"; Torpedo "E"; Engineering "E" along with Gunnery "Es" for long-range battle practice—second award; and local control practice, Mount 51—second award; Mount 52 and Mount 53—second award; for a grand total of 13 "Es" and hashmarks authorized.

To top this off, the Supply Department received the Force Commander's Excellence Award for which no display of the "E" is officially authorized. I note with pleasure, however, that an "E" is painted on the door of the Supply Office.

In the words of Admiral Chester C. Wood, USN, Commander Cruiser-Destroyer Force, U. S. Pacific Fleet, on the occasion of the presentation of the Battle Efficiency plaque, "Es are busting out all over."—R. W. Frieden, CDR, USNR, CO, *uss Bausell* (DD-845).

• Congratulations, Bausell. To all hands, a Well Done from ALL HANDS. And to you, Captain, many thanks for informing us about Bausell accomplishments. We consider it an honor to be able to pass the word about Bausell throughout the Navy.—ED.

Seavey and Shorvey

SIR: Here are a couple more questions for your growing collection on Seavey and Shorvey.

1. When do you figure the commencement date of shore duty for an individual who entered the Navy before 1 Jan '57, attended a Class "A" School upon completion of recruit training, and was then assigned to Fleet Shore Duty?

2. Is the normal tour of shore duty for persons such as those described in the above question, a full two years, unless specified otherwise?—W. P., AD2, USN.

• Personnel reporting from recruit

training, a class "P" school or receiving station to an activity classified as shore duty are considered to have commenced their tours of shore duty on the date of initial entry into active naval service.

In the case of personnel attending Class "A," "B," "C" or functional schools while in a transient status, that is, upon transfer from sea duty to shore duty or vice versa, the period of training is not counted against either the shore or sea tour.

In regard to your second question, the normal tour of shore duty for graduates of Class "A" Schools, other than HN, AN or DN, who have never served at sea, is 12 months from the date of first reporting to the shore command. Individuals received from aviation, hospitalman and dentalman class "A" schools, who have not served at sea, have 24 months of shore duty figured from the date they first reported to the shore command.—ED.

Souvenir Books

In this section ALL HANDS prints notices from ships and stations which are publishing souvenir records and wish to advise personnel formerly attached. Notices should be directed through channels to the Chief of Naval Personnel (Attn Editor, ALL HANDS) and should include approximate publication date, address of ship or station, price per copy and whether money is required with the order.

uss Salem (CA 139)—Preparations are being made for publication of a cruise book covering the Mediterranean tour of *uss Salem*, from May 1956 to May 1958.

If you are interested in obtaining a cruise book, you may send your order to the Business Manager, Cruise Book, *uss Salem* (CA 139), c/o Fleet Post Office, New York, N. Y. The cost is \$4 and payment should be made by money order.

Time to Say Aloha

SIR: I read the articles on Seavey in both the January and September 1957 issues of ALL HANDS.

They contain much information, but I see none on procedures to be followed in a case like mine.

I am assigned to a salvage ship home-ported at Pearl Harbor, and I do not want duty in the continental limits because I have established permanent residence in Hawaii. Therefore, I would prefer to remain on sea duty or have my overseas duty count as shore duty.

Is this possible under Seavey?—J. C. W., QMI, USN.

• If your ship is classified as sea duty, other than a non-rotated ship home-ported overseas, you may request an extension of your sea tour. Approval depends on the needs of the service at the time and your periods of absence from your home port. Also, you may request overseas shore duty in Hawaii under the Seavey.

If your ship is classified as a non-rotated ship home-ported overseas and an area tour applies to you, you may only request an extension of your overseas tour from the Commanding Officer EPDOPAC. The limit of total extensions is two years.

The reason you cannot stay in Pearl Harbor indefinitely is that other personnel desire such assignments. Each man may have his share, and the Navy program is intended to insure that all are provided their share.—ED.

G.I. Educational Benefits

SIR: The numerous letters appearing in ALL HANDS and various other publications on the subject of G.I. educational benefits indicates that a large number of Navymen are showing undue concern over the commencement and termination dates for college study under the Korean G.I. Bill.

The "basic service period" for eligibility for this training began 29 Jan 1950 and ended 31 Jan 1955. In the language of the law a man who served on active duty during that period must commence his training within three years after his first unconditional discharge. However, it is still possible for such an individual to remain in uniform for quite a few years without losing out on his educational benefits.

By reenlisting more than 90 days early, a man receives a conditional discharge. Therefore, he would have up to three years from the termination date of that new enlistment in which to commence his training. He might also extend his enlistment from one to four years and thereby add a corresponding amount of time to the commencement date of training.

Of course, since all Korean educational benefits end on 31 Jan 1965, he couldn't take advantage of the program after that

date. However, up to that time, and assuming that his course of study is scheduled to end before the cutoff date he could, by means of early reenlistment or extension of enlistment, vary the commencement date for his schooling almost to suit himself.—M. L. B., HMI, USN.

• That is correct, according to the current VA interpretation of the Veteran's Readjustment Assistance Act of 1952.

The term "unconditional discharge or release" means a discharge or release from active service which relieves the recipient thereof from any obligation for continued active service.

A discharge or release from active

service given solely for administrative purposes, such as acceptance of appointment as a commissioned or warrant officer, or to reenlist in the Regular Establishment, is considered a conditional discharge. Therefore, the three-year deadline period for commencement of training would not go into effect when such a discharge was issued.—ED.

Retired Pay at 19 and 6

SIR: Can a person on active duty be given severance pay even if he has completed 19 years, six months of continuous active duty?

How about in the case of an individual who has already transferred to the Fleet Reserve upon completion of

Well, What Do You Know? There Were Two Shawmuts and

SIR: Your October 1956 issue has finally worked down to my level and I'd like to comment on Shawmut to be found on page 37.

You say she was built in 1916, and drafted into war service as a minelayer in 1942.

I believe that is an error. In 1917, two vessels, Bunker Hill and Massachusetts operated alternately on the Boston-New York passenger service and when they were drafted into the naval service their names were changed to Shawmut and Aroostook. Later, the name of one was changed to Oglala which was later sunk at Pearl Harbor. I don't know which one this was, but I believe her sister ship is still in the service, though possibly inactivated.

Both these vessels were used in laying the North Sea mine barrage during World War I. Both were converted from their civilian status at the Boston Navy Yard and I assisted in equipping their deck load of mines at the Hingham (Mass.) Ammunition Depot under the direction of the late Chief Gunner Charrette of Spanish War fame and for whom a destroyer has been named.

Having made many trips between the above two cities on both of these vessels, I have a sort of sentimental feeling toward the Old Girl and wish to see her get the credit for her additional fogies. I think that both vessels sailed to attend their war duties from Boston in May 1918.—J. M. R., LCDR, USNR (Ret.)

• Perhaps you didn't mean it, but you have been the cause of considerable confusion and digging into musty files, on the part of Ships' History. However the results were well worth while.

As we understand their report, Shawmut isn't really Shawmut at all. She's Oglala. And Aroostook was somebody else. Here's the story:

uss Oglala, ex-uss Shawmut, ex-

ss Massachusetts was built in Philadelphia, as a coastal steamer and put in service in 1907. The Navy acquired her when we entered WW I, changed her name to Shawmut and commissioned her on 7 Dec 1917. Outfitted as a minelayer, Shawmut helped lay the North Sea mine field.

Instead of going back to her life of carrying passengers along the East Coast, Shawmut remained "in uniform" after the war. On 27 Jan 1919, she was designated an aviation tender and during the early '20s operated with the naval air arm. Naval aviation soon outgrew its need for Shawmut but progress couldn't push her off the scene. Her name was changed for the third and last time on 1 Jan 1928. Now known as uss Oglala (CM-4) she was again assigned to the mine force, where she served as flagship for Mine Division One.

Her life was routine for the next 13 years. When GQ sounded on the morning of 7 Dec 1941, Oglala was moored starboard side to the cruiser uss Helena (CA 50) at Pearl Harbor. Two minutes later, a torpedo exploded between her and Helena which caved in the side of Oglala and flooded the fireroom. An explosion from a bomb further ruptured her hull just as the engineering gang was busy securing the boilers to prevent an internal explosion. Although it was apparent by this time that Oglala would sink, her crew stayed by their guns. Two tugs were hailed to help her get clear of Helena so that the cruiser could get underway. The tugs pushed Oglala alongside a pier where all available lines were run out in an effort to keep her on an even keel, or at least afloat. Her list had increased to 20 degrees, by 0930, which made it impossible for her gun crews to continue firing. The ship was finally abandoned but not until all the machine guns which could be set up ashore had been removed. Shortly before 1000, Oglala

19 years, eight months of active duty—can he draw severance pay for a physical disability after transferring to the Fleet Reserve if he did not complete 20 full years of active duty?—J. F. H., GMC, USN.

• Yes, Chief, it is possible for a man to be given severance pay after completing 19 years and six months of active duty. However, provided the man concerned is physically able to perform his duties without further aggravating his disability, SecNav may defer action on the Physical Evaluation Board proceedings to permit him to complete a full 20 years of active federal service.

With respect to your second question—the answer is negative. A Fleet Re-

servist found not physically qualified to perform the duties of his rate will be permanently retired in the rate held, and with the pay to which entitled at the time he was placed on the retired list.—Ed.

Transfer after Hospitalization

SIR: My question is in regard to TAD orders. I was transferred to the Naval Training Center, Bainbridge, Md., from USS Des Moines (CA 134) on 8 Feb 1957 to attend the Class "A" FT school for 19 weeks. I completed only eight weeks of school before being admitted to the hospital.

By the time I am discharged from the hospital and complete my school it will

be February 1958, a total of 12 months away from my ship. Will I be returned to Des Moines or receive a new set of orders? What is the regulation covering a situation such as this?—H.R.R., SN, USN.

• In the situation you outlined it is not likely you will be returned to Des Moines, provided the period of hospitalization was in excess of one month. If the time you spent in the hospital covered more than a month, you will be made available to this Bureau for assignment. You will be returned to the Naval Training Center for completion of school, then be made available for further assignment to duty.

However, if hospitalization was for a

Two Aroostooks — If you Want All the Facts Read On, But Please, No More Questions

rolled over and came to rest on her port side in six fathoms of water.

During the following months repair parties had to devote their time to restoring capital ships to duty and unscrambling shore installations, so Oglala was left to the mud and the barnacles. When she was at last brought to the surface, her superstructure was crushed and mud, rust and barnacles had done their job well. But Oglala wasn't about to give up the ghost. Chipping hammers, welding and cutting torches, new engine parts and a temporary plywood superstructure prepared Oglala for her voyage to San Francisco where she was fitted out with the necessary shops to effect any type of repairs, and enough guns to protect her from an air attack. Oglala (ARG 1) was again placed in full commission in February 1944.

Following her sea trials and shake-down cruise, she was assigned to Milne Bay, New Guinea. Here she acted as repair facility for landing and patrol craft. As the war developed, Oglala was reassigned, first to Hollandia and later to San Pedro Bay, Leyte, each time towing an auxiliary floating drydock to help her in her work. Her machine shops, electrical department, radio technicians, supply officers, and doctors, were welcome sights for those who needed her services.

Upon her return to the United States, in 1947, Oglala was declared surplus and sold. It was the end of the line for the "old lady," having survived two wars, a sinking, three names and 40 years of service.

According to Ships' History, there has been only one Oglala but there have been two other ships named USS Shawmut. The first Shawmut, a wooden gunboat, was commissioned in 1864 and saw duty during the Civil War with the North Atlantic Squadron. She was sold in 1883. The second Shawmut we've already covered. The last Shawmut was Shawmut for only a few months. She was the ex-USS Salem (CM 11), before she was stricken from the Navy list.

All squared away on Oglala? OK, let's clear up Aroostook.

Aroostook No. 1 was a wooden screw steamer built in Kennebunk, Me., and commissioned in Boston in 1862. Her first assignment was with the James River Flotilla. She also helped blockade Mobile, Ala., and later participated in blockading the coast of Texas. She captured five ships, sank one and was given one assist. Aroostook served with the Asiatic Squadron from 1867-1869 when she was sold at Hong Kong, China.

The second Aroostook was the ex-USS Bunker Hill, the sister ship of the

Oglala back when that ship was Shawmut and Massachusetts. She has a very similar history. She was built in 1907, purchased by the Navy in 1917 and converted to a minelayer. Her assignment was with Mine Force Atlantic in Europe where she remained until December 1918. She made one more trip to Europe before her transfer to the West Coast and conversion to an aircraft tender in 1920.

For the next 10 years, Aroostook served with the air arm of the Pacific Fleet and came east for only short periods to bring Marines to Nicaragua in 1927 and take them back to the West Coast in 1930. Puget Sound Naval Shipyard was home for the decommissioned Aroostook from 1931 until WW II. At this point she was converted to AK 44 and in 1943 was transferred to the Army.

There was still one more Aroostook. She was the ex-USS Esso Delivery, a motor tanker acquired by the Navy in 1943.

As the AOG 14 she carried high octane gasoline in Mediterranean convoys until she was decommissioned and turned over to the French government in 1945. She was returned to the Navy and sold out of service in 1949.

Everything cleared up?—Ed.

USS Shawmut, WW I



USS Oglala, (CM 4), 1929



USS Oglala, (ARG 1), WW II





DRY ICE BREAKER—USS Burton Island (AGB 1) sits on keel blocks during repairs for her trip to the Antarctic.

period of less than 30 days you will be returned to the NTC for completion of the course of instruction and then transferred back to Des Moines. The reference in this case is BuPers Inst. 1306.50A.—Ed.

Rock and Roll

SIR: After reading the article entitled "Ship's Service By the Yard," which appeared in the October '57 issue of ALL HANDS, I thought that some of your readers would be interested in seeing this picture of *uss Burton Island* (AGB 1) drydocked at Seattle shortly before we departed for the Antarctic and Operation Deep Freeze III.

Many ships take on a mighty unfamiliar appearance when high and dry

out of the water and perhaps an ice breaker such as *Burton Island* presents a shape unlike any other naval vessel. As you can see, AGB 1's beam is wide and her hull is almost egg-shaped. Built for strength, power and mobility as well as for icebreaking qualities, AGBs of the *Wind* class are better known for their unique cold weather work . . . breaking ice in the polar regions of both hemispheres—than for the beauty of their lines.

As you can see by the picture, AGBs exhibit bottom characteristics somewhat different from most naval ships. Perhaps some of your readers would be interested in comparing the bottom view of *Burton Island* with that of their own ship. . . . R. P. H., LTJG, USN.

• *When it comes to rock and roll, we can see why *uss Burton Island* takes the cake. Thanks for the photo of your shipmates' favorite pin-up.—Ed.*

How's This for a Twist?

SIR: Here's an unusual twist that we aboard *uss Damato* (DDE 871) think would be interesting to the readers of ALL HANDS.

Did you ever hear of a DDE "refueling" an AO?

Well, *Damato* did. During Midshipman Cruise ALFA, while en route to Santos, Brazil, *Damato* was sent 50 miles astern of the Midshipman Cruising Force to "refuel" *uss Nantahala* (AO 60).

In this case, however, the fuel was 6500 gallons of feed water. Although it was a water "refueling," all hands aboard *Damato* felt they had something to be proud of, because many of the accompanying ships were on water hours.—B. A. Thielges, CDR, USN.

• *That goes to show you that DDEs are capable of living up to the old adage about destroyers being the "work-*



GREYHOUNDS RESTING—USS Hollister (DD 788) and **USS Arnold J. Isbell** (DD 869) of CruDesPac pose for photo.

horses of the Fleet." Wonder if this is a "first"?—Ed.

Length of Shore Duty Tour

SIR: Last February I was made available to the Bureau for reassignment with an Enlisted Job Code number of PI-3501-45. On 17 Jul 1957 I reenlisted and my code number was submitted as PN-2600 with a secondary as LI-3652. Since I took the examination in August for PN1, I am now in doubt as to when I can expect rotation to sea.—R. D. L., P11, USN.

• *Until your rating is changed, your normal shore tour will be 24 months. If your rating is changed to one having a longer tour, your shore tour completion date should be changed by your commanding officer at the time your rating change is effected, but in no case beyond your EAOS (Expiration of Active Obligated Service).—Ed.*

...how to send ALL HANDS to the folks at home

Superintendent of Documents
Government Printing Office
Washington 25, D.C.

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NAME.....

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This Is Your Dish If You Like Knots, Plain and Fancy

SIR: I have long been an admirer of fancy knotting or rope work and, during the more than 20 years I've been in the Navy, I've made three knot boards.



Chief Mickalson

Since I'll be going into the Fleet Reserve this year I decided to make the last one a real souvenir of the Navy. It's my biggest yet, measuring 36 by 57 inches, and is made of cherry-stained wood. The inner

and outer borders alone contain about 3000 square knots.

I began the project when I was serving in *uss Cacapon* (AO 52) during winter operations off Korea. While working on it in my spare time I decided to learn all I could about fancy knots and their history and to use this board as a way of showing what can be done with lines of different types. It will occupy a special place in the den of my home.

Incidentally, I am very proud to have been in *Cacapon's* crew, so I hope this letter will help bring her a little recognition. The tanker sailors deserve all the publicity they can get.—Elmer C. Mickalson, BMC, USN.

• We've seen quite a few knot boards in our day, but we can't recall

any that were more impressive than yours. It's a beautiful job.

Other than that, there isn't much we can say, except to comply with your request that we give *Cacapon* a mention. We can just hear other crews say:

"*Cacapon*, *Cacapon*, *Cacapon*—It seems as though *Cacapon* is the only tanker that ever gets a mention in A.L.I. HANDS. Our ship is just as good as *Cacapon*, or maybe even better, but you never print a word about her. How come?"

We'll be ready for 'em though. All we have to do is ask if they have anyone in their ships who can make a knot board like the one that Chief Mickalson started when he served in *Cacapon*.—ED.

- | | | | | | |
|-------------------------|-----------------------------|-----------------------|--------------------------------|---|------------------------------------|
| 1. Bowline | 12. Studding Sail Tack Bend | 24. Double Sheet Bend | 38. Common Sennit | 49. Napoleon Bend | Sennit Carrick Bend |
| 2. French Bowline | 13. Double Becket Bend | 25. Figure-Eight Knot | 39. Eye Splice | 50. Arrowhead Knot | 56. Figure-Eight Chain Knot |
| 3. Bowline on a Bight | 14. Fisherman's Bend | 26. Trefoil Knot | 40. Splice-in-a-Bight | 51. Royal Carrick Bend | 57. Varied Sailor's Breastplate |
| 4. Spanish Bowline | 15. Slide Knot | 27. Sheepshank Bend | 41. Wall & Crown & Back-Splice | 52. Open Napoleon Bend | 58. Three-Leaf Chinese Temple Knot |
| 5. Thumb Bowline | 16. Reef Knot | 28. Reeling-Line Bend | 42. Plain Woven Mat | 53. Interlocking Carrick Bend, with outside overhand knot | 59. Spear Head Knot |
| 6. Bowline with a Bight | 17. Granny Knot | 29. Chain Knot | 43. Cat's-Paw | 54. Interlocking Rosette Carrick Bend | 60. Rope Anchor |
| 7. Running Bowline | 18. Surgeon's Knot | 30. Monkey's Fist | 44. "U" Name It | 55. Interlocking | 61. Victory Wreath |
| 8. Harness Hitch | 19. Stevedore Knot | 31. Flemishing | 45. Wall Knot | | 62. Double Carrick Bend |
| 9. Masthead Knot | 20. Single Carrick Bend | 32. Coiling | 46. Overhand Knot | | Open Carrick Bend |
| 10. Anchor Knot | 21. Double Carrick Bend | 33. Faking | 47. Double Bowknot | | |
| 11. Prolong Knot | 22. Thief Knot | 34. Boat Fender | 48. Double Matthew Walker | | |
| | 23. Loop Knot | 35. Coxcomb | | | |
| | | 36. Square Sennit | | | |
| | | 37. Flat Sennit | | | |



News for the Navigating Navyman

AS ALL GOOD boatswain's mates, quartermasters and signalmen know, a new system of coastal warning signals goes into effect this month (as of 1 January). ALL HANDS takes this occasion to bring all hands up to date on the current buoys, markers and signals, and ship's signals at sea. You'll find the illustrations on pages 32-33.

For many years, whenever winds dangerous to navigation have been forecast by the U. S. Weather Bureau, storm warning signals have been displayed along the coasts of the United States, the Great Lakes, the Hawaiian Islands, and Puerto Rico.

Under the new system, only four separate flag signals will be used during the day, instead of the six separate flag signals formerly used. During the night, only four comparable lantern signals will be used for small craft, gale, whole gale and hurricane warnings.

The major differences between the old and the new visual warning display systems are:

- The substitution of a single non-directional "gale warning" signal for the four separate directional "storm warning" signals that were used to specify northeast, southeast, southwest, or northwest gales.
- The introduction of a new lantern signal for use during the night for small craft warnings. Under the old system, displays for small craft warnings were used in the daytime only.
- The introduction of a new and separate signal for whole gale warnings. Under the old system the same signal was used for whole gales and hurricanes.

These visual storm warning signals displayed along the coasts are supplementary to, and not a replacement for, the written advisories and warnings distributed by press, radio and TV. In most cases, important details of the forecasts and warnings in regard to the time, intensity, duration and direction of storms cannot be given satisfactorily through visual signals alone.

Here's a description of the new display signals:

Small Craft Warning: One red pennant displayed by day and a red light above a white light at night to indicate winds up to 38 miles an hour (33 knots) and/or sea conditions dangerous to small craft.

Gale Warning: Two red pennants displayed by day and a white light above a red light at night to indicate winds ranging from 39 to 54 miles an hour (34 to 48 knots).

Whole Gale Warning: A single square red flag with a black center displayed during daytime and two red lights at night to indicate winds ranging from 55 to 73 miles (48 to 63 knots).

Hurricane Warning: Two square red flags with black centers displayed by day and a white light between two red lights at night to indicate winds 74 miles an hour (64 knots) and more.

• **LIGHTS**—Although it is likely that navigational lights had been used for some time before 1854, in that

year there was enacted the first official legislation, called the Merchant Shipping Act, that made it obligatory for waterborne traffic to show navigational lights. Later, the introduction of steam increased the numbers of ships of various nations traveling at higher speeds in the same sea lanes. International conferences were held to standardize the navigational light system. The *Regulations to Prevent Collisions of Vessels at Sea*, better known as "Rules of the Road," were adopted by the International Convention for Safety of Life at Sea, held in Washington in 1889. These rules form the basis for the present traffic code of the sea. The current regulations are contained in Coast Guard Publication No. 169, dated 2 Jan 1957.

The lights required by the Rules of the Road vary with types of ships, the situations which a ship may encounter, and the operation in which she may be engaged. These lights, used in various combinations of position and color, convey a definite message to ships in the vicinity.

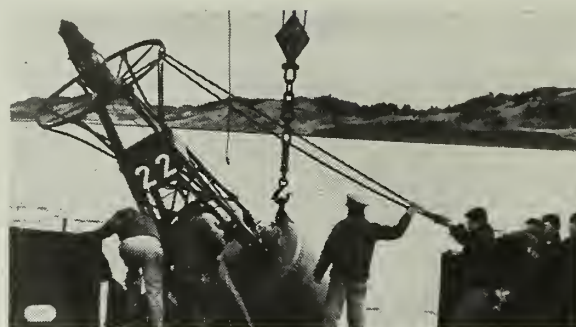
High up on the mast are two red lights, known as the *breakdown lights*. These are used at night when a breakdown endangers nearby ships. *Running lights* are of three types. A *masthead light* is a fixed light usually located on the upper part of the bridge superstructure or on a small shelf extending forward from the foremast. The masthead light is a bright white light which is required by the Rules of the Road to be carried by all steam vessels underway. The *range light*, a bright white light, is positioned abaft and above the masthead light, and it may be either on the foremast or the mainmast. When the range light is used in connection with the masthead light, the combination is termed the range lights. A green *sidelight* is carried on the starboard side and a red on the port side.

Towing lights and *anchor lights* are also used when the situation requires them.

• **BUOYS** are among the most important aids to navigation along any coastline. They are used to mark shoals or other obstructions and dangers; to indicate the approaches, entrances, turns, and limits of channels; as markers in the center of a fairway; and to define anchorage grounds and other special areas.

Buoy symbols on charts do not picture the appearance of a buoy. All buoys are indicated by an elongated diamond with either a dot or star at one end which marks its position on the chart. A red or black diamond indicates a buoy of these colors. Half red and half black means red and black horizontal stripes. When the outline of the diamond is not filled in, except for a line on its longer axis, it indicates vertical black and white stripes.

No matter what their shape, red buoys are on the right when entering from the sea and, when offshore, are red on the right when traveling down the Atlantic Coast or up the Pacific Coast. Black buoys are on the left when entering from the sea. In foreign coastal



Lighted Bell Buoy

waters a different buoyage system may be used—always check your *Sailing Directions* before entering a foreign port.

Red and black horizontal bands indicate an isolated danger. Black and white vertical stripes indicate mid-channel buoys. White buoys mark anchorage grounds or experimental courses. Yellow marks a quarantine anchorage. White with green top indicates dredging marks.

A *spar* buoy is practically straight and, until you can see its color, it is frequently difficult to determine its meaning. In many areas, spars are being replaced with nuns or cans.

A *nun* is conical or has a conical top, and is generally painted red as indicating the right side of a channel when entering from the sea. When with red and black horizontal bands it is on an obstruction with the best channel on the left when entering. A nun painted with black and white vertical stripes is in mid-channel and may be passed on either side. When you don't know the color of a nun buoy, it is wise to assume it is red and keep it to your right when entering.

A *can* is cylindrical with a flat top and is generally painted black to indicate the left side of the channel when entering. When painted with black and red horizontal stripes, it is on an obstruction with the preferred channel to the right of the buoy when entering. Black and white vertical stripes on any buoy indicate mid-channel and may be passed on either side. If you can't recognize the color of a can, consider it to be black and carry it to the left when entering.

Numbers or letters on a buoy offer additional identification. *Even* numbers are on the right side of the channel when entering; *odd* numbers are on the left; numbers increase from seaward. Buoys not in a numbered sequence are sometimes distinguished by letters, and letters are sometimes added to numbers.

In addition to the numbered and colored nun, spar and can buoys, there are also many other types. They include:

Bell buoys which consist of a flat buoy with a framework mounted on it in which a bell is fixed.

Gong buoys are somewhat similar to bell buoys but have four gongs instead of one. Each gong has a different tone.

Whistle buoys are usually cone-shaped, bearing a whistle that is sounded in most cases by the motion of the sea.

Lighted buoys, although not uniform in shape, look somewhat like a bell buoy. Light is given off by batteries or gas stored within the buoy.

Combination buoys are just what the name implies.

A combination of light and sound, such as a lighted bell buoy, lighted gong buoy, or lighted whistle buoy. Combination buoys come in various shapes and sizes.

• **TEMPORARY CHANNEL MARKERS** usually consist of floats carrying lights, pennants, or lights and pennants. Red pennants mark the right side of the channel and black pennants mark the left side. Red and black vertically striped pennants mark obstructions and channel junctions, and black and white vertically striped pennants mark the midchannel or fairway. If lighted, the right side of the channel will be marked by red lights, the left by white lights, obstructions by blue-over-red combination lights, and fairways by green lights.

Closely related to the signs and signals of the Rules of the Road are visual communications which are used to a considerable extent by ships at sea and in port. The more popular methods of visual signaling include semaphore, flaghoist and flashing light.

• **SEMAPHORE** and flashing light can be used interchangeably for many purposes. Semaphore is more rapid for short distance transmission in daylight. Also, because of its speed, semaphore is better adapted to the sending of long messages.

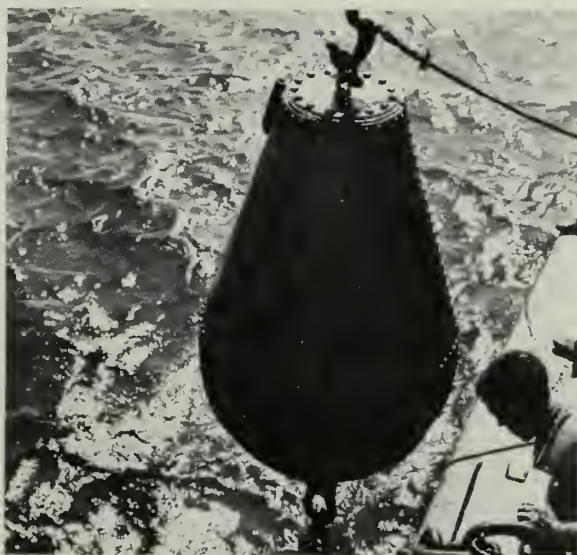
Flaghoist calls, as a call-up for semaphore messages, are used extensively, but at anchor only. The calling station hoists at the yardarm the call-sign of the station being called. The latter then hoists the calling station's call signal over the answering pennant, close up, to signify readiness to receive the semaphore message. The receiving station receipts by hauling down.

• **FLAGHOIST** signaling is most rapid and accurate visual method when in easy signaling distance in daytime. Signals normally are repeated by the addressee, thus providing a sure check on the accuracy of reception.

The Navy uses the Allied Naval Signal Flags shown on the next two pages for flag hoist signaling. They are mainly used to convey tactical and informational messages during daylight between ships that are in close company with each other. Flaghoist is considered the best way to insure uniform execution of maneuvers.

• **FLASHING LIGHT OR BLINKER** is a visual tele-

graphic system using the International Morse Code. Like all visual methods, it is best adapted to tactical traffic, though its use is not so confined to operational messages as is flaghoist. Short administrative messages are often sent by flashing light instead of by radio. It can be used interchangeably with semaphore. In peacetime, the lights are used at night, when semaphore cannot be seen. Flashing light is usually used either by day or night, when considerable distance is involved.

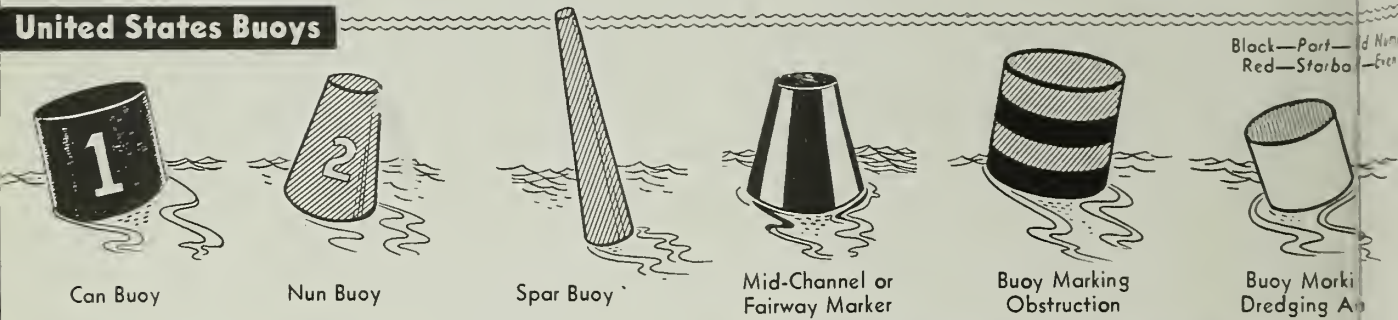


Nun Buoy

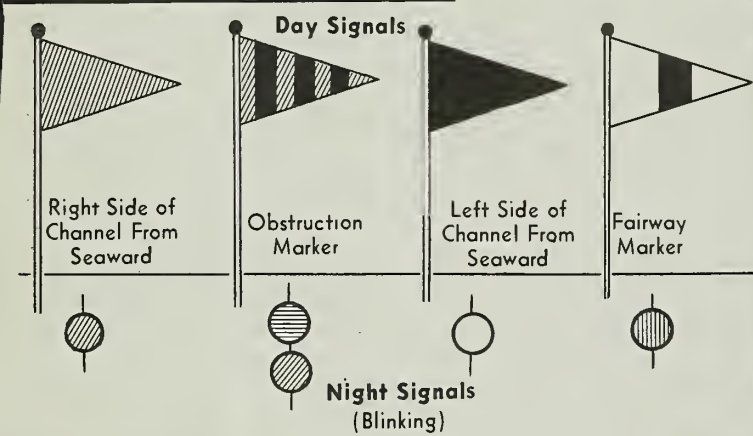
SIGNS and SIGNALS at S

Color Code Red  Green  Yellow 

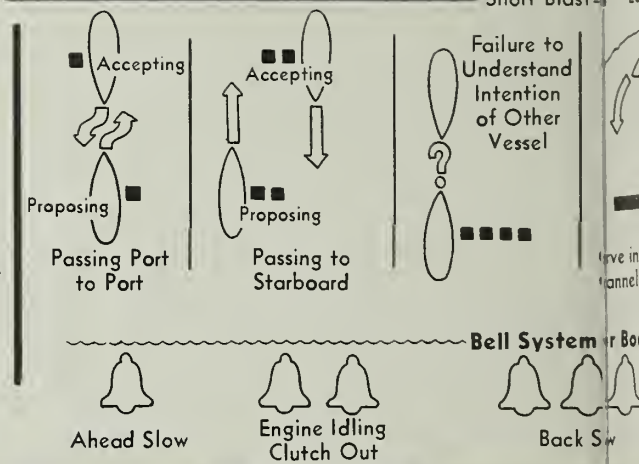
United States Buoys



Temporary Channel Markers

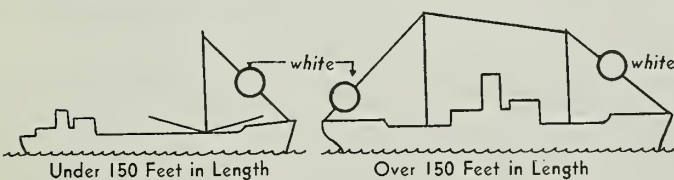


Inland Waters Sound Signals



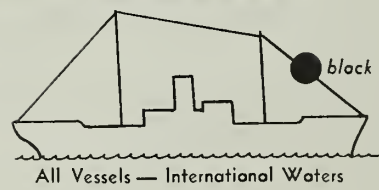
Anchor Lights

Night Signals—Lights at Anchor

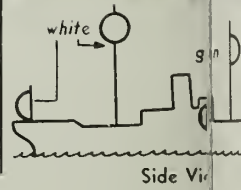


Day Anchor Signal


















Black Ball at Anchor




Running Lights



International Alphabet, Flags

A ALFA 	B BRAVO 	C CHARLIE 	D DELTA 	E ECHO 	F FOXTROT 	G GOLF 	H HOTEL 
P PAPA 	Q QUEBEC 	R ROMEO 	S SIERRA 	T TANGO 	U UNIFORM 		
Attention 	Front 	Error 					

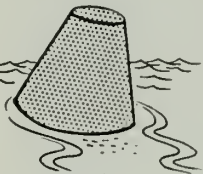
SEA for the SAILOR

Blue 

Black 

White 

Odd Numbers
Even Numbers



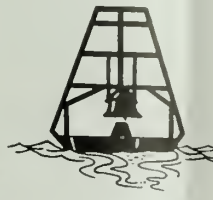
Quarantine Anchorage



Fish Trap or Net Marker



Lighted Buoy



Bell Buoy

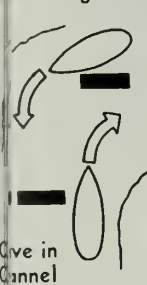


Whistle Buoy

Storm Warnings

Effective 1 January 1958

Long Blast: 



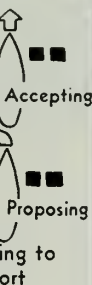
Passing in Channel

Passing to Starboard



Accepting

Proposing



Accepting

Proposing

Passing to Port

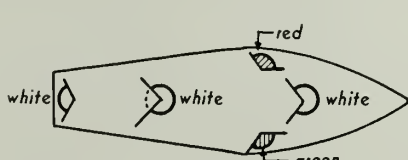
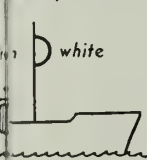
Boats



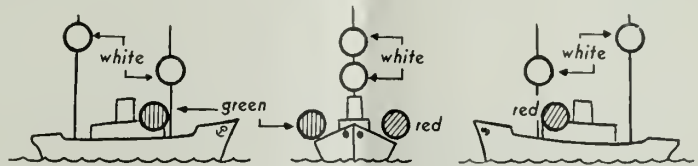
Full Ahead in Direction When Signal Was Given

ts

erway

















Top View



Starboard

Head-On

Port

	INDIA		JULIETT		KILO		LIMA		MIKE		NOVEMBER		OSCAR
	VICTOR		WHISKEY		XRAY		YANKEE		ZULU	 Numerals  Answer			



ROUND AND ROUND—Wakes of landing craft make pattern in sea during amphibious landing demonstrations.

Beach Party — Alligator Style

FOR MOST PEOPLE hitting the beach is for pleasure and relaxation, but not so with the Navymen of the Amphibious Training Command located at Little Creek, Va. For these men it is the serious business of amphibious warfare training that they teach each year to thousands of men from all branches of the armed forces including Midshipmen from Annapolis, West Point Cadets

and visiting NATO Navymen.

This past year marked the twelfth in which men from the U. S. armed forces, in addition to military students of friendly foreign nations, have been instructed in amphibious subjects from the operation of small landing craft to the complete planning of a coordinated amphibious operation.

Joint amphibious operations at

HOT TIME—'Beach party' held by Amphibious Training Command each year for members of the armed forces covers all phases of assault from the sea.

Little Creek, perhaps the most difficult and complex of all military movements, present an unparalleled challenge for training.

This is training in which all military branches must be proficient. It is obviously wasteful of time and material to place an air umbrella over a beach objective and pin down the troops intending to defend it, if the Navy is unable to land ground forces at the exact time and place called for in an operational order. It is equally futile for the Navy to carry out effectively its mission of bringing combat troops to beaches if these troops are unacquainted with or inexperienced in the techniques of debarking, coming ashore, deploying and advancing on the enemy shore installations.

Within the space of a few thousand yards—in the narrow gap between the seaborne invasion force and enemy resistance ashore—the striking power of all branches of the armed forces must be marshalled and coordinated for maximum effect.

If joint effort is to be successful, it must be closely timed and smoothly synchronized. Skill in these operations is born of constant study and practice such as that which unfolds each summer on the beaches



ALL HANDS

of the U. S. Naval Amphibious Base, Little Creek, Va.

First taste of amphibious operation for the trainees consists of study of the organization and functions of a joint amphibious task force. Then after an over-all look at amphib warfare, the men receive instructions in specialized aspects. Typical of these subjects is Amphibious Intelligence where the student learns to collect, evaluate, and disseminate intelligence in the amphibious operation.

Other subjects include requirements of and need for an amphibious operation order; influence of nuclear weapons on such an operation; and problems of combat-loading of ships and ship-to-shore movement.

Indoors and out, the U. S. and foreign students gain the benefit of other military personnel's past experiences in a two-week capsule. They descend on landing nets at sea, take part in ship-to-shore movement and shore party operations, and try out boat handling, beach party operations, naval gunfire support, and communications.

Going afloat for four days, the trainees fill the roles of combat information center officers, deck officers, boat coxswains, troop officers and NCOs and perform other tasks of an amphibious attack and landing force. Then on the last day of the two-week training period they par-

SECOND-STORY men of invasion demonstrate vertical envelopment phase of amphibious warfare as 'copters bring troops in over the landing craft.

ticipate in a realistic assault landing on Virginia beaches.

In this year's operations, a task force of 14,000 men in 35 offshore ships provided the landing craft, helicopters and other support for the students and two thousand Marines who hit the beach together in a typical operation.

From bleachers on the shore several hundred civilians and high ranking military officers watched the landings along with 550 U. S. Military Academy cadets as part of their

orientation in naval coordinated operations.

When the indoctrination ended and the beach was secured all the students agreed that the life of an "alligatorman" is exacting. He must be tough—plenty tough—in order to withstand the rigors of the varying conditions under which he operates. This means he must be physically fit and mentally alert; the training at Little Creek is directed toward this end.

—James J. French, JO2, USN.

ASSAULT WAVES of landing craft advance toward beaches of Little Creek, Va., for combat with the enemy.



★★★★★ TODAY'S NAVY ★★★★★



STACKED—Three F9F Cougar jets of VF-144 make a striking appearance while operating off USS *Hornet* (CVA 12) in the Far East. Note new tail markings.

AVP Subs as Flattop

As a rule, a ship's designator gives a pretty good idea of its primary job. *uss Floyds Bay* (AVP 40), for example, calls herself a seaplane tender. For a relatively short period, however, she almost moved up into the *Forrestal*, *Saratoga* and *Ranger* class. Or maybe *Thetis Bay*.

While participating in a search for a downed pilot off the coast of Santa Catalina Island, *Floyds Bay* was asked to take aboard a rescue helicopter that was low on fuel. Although, like most seaplane tenders, *Floyds Bay* was not equipped with a flight deck, it didn't take several months in a shipyard to make the conversion. It took 10 minutes.

To make the landing possible two eight-foot stanchions were rigged and the flag staff cut away. After

alterations the space left for the helicopter, which normally requires 90 feet in diameter to land, was only 30 by 35 feet.

At this point, Edward Tyrell, AB2, who had experience in landing helicopters, used a pair of red and green flags to good advantage, directing the helicopter to hover, lower and stop. The helicopter, an HUP from HU-1 at Ream Field, nestled down with about a foot to spare fore and aft and 10 minutes of fuel left.

The "whirlybird" was refueled and the pilot downed a cup of coffee before taking off to rejoin the search. So successful was the maneuver that *Floyds Bay* took aboard another helicopter—this one a pot-bellied Marine HS copter from MCAS, El Toro.

Both pilots gave credit to Tyrell for making the landings possible.

Radar for Landing Craft

New lightweight radars aboard amphibious control craft will help coxswains land assault troops on an enemy beach in fog or other conditions of zero visibility day or night with pinpoint accuracy and timing.

LCP(L) (landing craft, personnel, large) and LCV (landing craft, vehicle) will soon be outfitted with small-boat radars. The new Navy model has proven to be accurate, rugged and easy to operate and maintain during recent tests at the Naval Amphibious Base, Little Creek, Va.

The radars will enable small craft to navigate safely through uncharted or dangerous waters by providing sharp, high definition targets on a 10-inch radarscope.

At present the radar will be installed in only a percentage of landing craft. During an invasion landing, radar-equipped leaders can check not only their own positions, but can monitor the other craft as well.

Rescue Copter Certificates

Helicopter Utility Squadron Two has awarded 12 men Rescue Helicopter Aircrewman Certificates in recognition of their proficiency in the art of helicopter rescue.

The certificates, originated by HU-2, are awarded as a means of formally recognizing the skill necessary to qualify and serve as a helicopter-borne lifesaver.

The designation of Rescue Helicopter Aircrewman signifies that in addition to the general qualifications of an aircrewman, the recipient has demonstrated his skill in helicopter rescue procedures. He has shown his ability to go into the sea from the helicopter to rescue an unconscious or helpless survivor.

The first group to receive the certificates from HU-2 includes: J. D. Herber, AD2; W. A. Monnen, AD3; J. R. Funk, AD2; W. J. Keller, AD2; W. D. Brown, AD1; A. F. Gerencser, ADC; D. B. Moyer, AD3; J. J. Geddes, AE1; G. G. Earl, ADC; C. W. Peterson, ADC; A. H. Milot, AT2, and R. A. Hefferman, AD3.

YESTERDAY'S NAVY



On 19 Jan 1840 *uss Vincennes* and *Peacock*, of LT Charles Wilkes' expedition positively and independently identified land in the Antarctic area. On 26 Jan 1913 the body of John Paul Jones was placed in its crypt in the Chapel at the U. S. Naval Academy, Annapolis, Md. On 26 Jan 1856 *uss Decatur* shelled Seattle, Wash., to protect the settlers from Indians. On 27 Jan 1942 *uss Seawolf* (SS 197) delivered ammunition to American forces at Corregidor, P.I., and evacuated Navy and Army pilots. On 31 Jan 1944, the Navy landed Marines and Army troops on Kwajalein and Majuro in the Marshalls.



IT'S BEAN GOOD—Newsmen sample bean soup entry of G. C. Koller. Rt: Top soupman Chief Smith and beans.

What's for Chow? You Guessed It — A Prize-winner!

Navy beans have gone to pot—literally, not figuratively—in a world-wide effort to show that seagoing chefs serve super soup.

The effort—a contest jointly sponsored by a newspaper in Memphis, Tenn., the *Commercial Appeal*, and the Chief of Naval Air Technical Training at NAS, Memphis—was dubbed "Operation Bean Soup." Object of the slurp-slurp (as opposed to hush-hush) operation was to find the best soup recipe in the Navy and, in the process, the Navy's best bean soup cook.

Despite the fact that contestants had less than three weeks in which to submit their recipes, 81 official entries got in under the wire. And, counting those which were too late to make the contest deadline, more than 100 recipes were "soupmitted." To give the contest an international flavor there were even entries from the Greek and Italian navies.

The recipes came from as far away as Antarctica and from as high up as a four-star admiral, but the contest winner — the souperman supreme — was a four-star professional cook—Charles Smith, CSC, USN, who is in charge of the galley at the Naval Radio Station, Sabana Seca, Puerto Rico. Second place went to A. Guadalupe, SDC, USN, of USS *Bon Homme Richard* (CVA 31), and the third-prize went to G. C. Koller and K. R. Schneider, CS1s, USN, of NAS Memphis.

Smith's winning recipe (which serves 100) calls for:

- Five and one-half pounds Navy beans soaked in water three to four hours and drained
- Cold water sufficient to cover beans
- Five and one-half ounces chicken base

One ounce chili powder
One-fourth ounce whole cloves
One pound chopped onions
One-half pound chopped green pepper
One and one-half ounces salt

To cook it, let the ingredients simmer three to four hours. Add water as needed. Mix together eight ounces flour, one-half ounce pepper and one quart water, blending into smooth paste and stirring into soup. Simmer additional one-half hour if water and flour are used.

In addition to the three top recipes, seven entries were accorded honorable mentions. These came from USS *Lake Champlain* (CVA 39); USS *English* (DD 696); USS *Harve* (PCE 877); NOB Yokosuka, Japan; the Station Hospital, Naples Italy; the Little America station for Operation Deep Freeze; and the Submarine Force, Pacific Fleet.

Two entries with a distinct southern flavor had to be eliminated from competition because they were not considered true Navy bean soups. One of these, entered by VADM

Charles R. Brown, an Alabaman, called for the use of black-eyed peas instead of Navy beans. The other, "Dixie Soup," entered by ADM Jerauld Wright, was apparently designed for use with Confederate Navy beans. Here, in part, is ADM Wright's recipe:

"Pass beans through a de-Bostonator to remove any trace of New Englandism and treat thoroughly with a Memphasizer for Southernization.

"Next, take a large Tennessee onion and peel and slice without restraint of emotion. Simmer with a large hunk of butter churned by a Tennessee mountain maid from cream given by a cow bred south of the Mason-Dixon line and fed on Shelby County (Tenn.) corn. Add a small piece of smoked pork fat cut from a young plantation-grown and hand-fed pig.

"Cook selected beans to consistency desired and fold in other ingredients. Pass resulting elixir through an Armed Forces amalgamator to assure finest possible blend. Serve for breakfast."

The soup contest made quite a hit with the people of Memphis. In a special luncheon at a local bank and in five local restaurants, Commissaryman Smith's first-prize soup was featured on the menu. At two of the restaurants demand for the soup exceeded the supply. Customers had to be turned away the first day the soup was served, so both places featured the soup for a whole week.

Because this year's Operation Bean Soup was such a success there's a good chance that the contest will be made an annual event from now on.

SOUP SIPPER — Under Secretary of Navy, W. B. Franke, tastes entry — acting as one of the contest's judges.





BLUEJACKETS IN RED COATS — In commemoration of Yorktown victory, sailors of USS Currituck (AV 7) re-enact battle in old time British uniforms.

Ship Inactivation Schedule

Twenty-two more ships—among them the heavy cruiser, USS Albany (CA 123)—will be inactivated in the first six months of 1958 to comply with limitations on personnel and funds. These mothballings, designed to provide the best possible balance

of naval forces while remaining within the limitations imposed for fiscal year 1958, will reduce the number of active Fleet units to 901 by 30 June.

Men in the 22 ships will be reassigned to other operating units or to new or converted ships scheduled

for commissioning in the near future.

The ships involved and their inactivation dates are as follows:

uss Albany (CA 123)	(Date not set)
uss Owen (DD536)	28 Feb-27 May
uss Stephen Potter (DD 538)	28 Mar-27 Jun
uss Erben (DD 631)	28 Feb-27 Jun
uss Stembel (DD 644)	28 Feb-27 May
uss Balao (SS 285)	11 May-31 Jul
uss Virgo (AKA 20)	10 Feb-9 May
uss Carpellotti (APD 136)	1 Feb-30 Apr
uss Shea (DM 30)	10 Jan-9 Apr
uss Gwin (DM 33)	13 Jan-12 Apr
uss Harkness (MHC 12)	3 Feb-2 Apr
uss Jas. M. Gilliss (MHC 13)	30 May-29 Jul
uss Bunting (MHC 45)	1 May-30 Jun
uss Gull (MHC 46)	15 Nov (1957)-14 Jan
uss Merganser (MHC 47)	3 Feb-2 Apr
uss Waxbill (MHC 50)	1 May-30 Jun
uss Blackbird (MHC 11)	3 Feb-2 Apr
uss Albatross (MSC(O) 1)	(Date not set)
uss Ches. T. O'Brien (DE 421)	1 Apr-30 Jun
uss Tweedy (DE 532)	11 Apr-10 Jul
uss Tills (DE 748)	15 Apr-14 Jul
uss McClelland (DE 750)	15 Apr-14 Jul

The last two ships, *Tills* and *McClelland* are now assigned to naval districts for Reserve training. They will be replaced by *Coolbaugh* (DE 217) and *Greenwood* (DE 679).

Another Prizewinner — This One Takes the Cake

Off-duty hours earned a first place prize in "Practical Cake Decoration" for James Nieto, CS2, USN, at the 42nd National Hotel Exposition held in New York.

The theme used for the exhibit was "Holiday." A dozen cakes were baked, each decorated to represent a holiday of the year. For such a task Nieto thought out and drew on tracing paper, designs which would represent the national holidays. On one cake New Year's Eve was symbolized by the face of a clock with its hands stopped at five minutes before twelve.

"It's with pressure exerted from the knuckles," declared Nieto in explaining how he decorated the cake with a frosting tube. Thus with a facile hand Nieto topped one cake in green frosting with a clover leaf for St. Patrick's Day, another in orange with a pumpkin for Halloween and with pink and red he painted a heart on the Valentine Day cake.

Nieto is the pastry cook at the U. S. Naval Receiving Station, Brooklyn. On his off-duty hours he studied culinary techniques at the Community College in Brooklyn.

Nieto hails from South Gate, Calif., and attended Gallup High School in Gallup, New Mexico. He entered the Navy in 1942, and after boot training in San Diego, was sent to Pearl Harbor for his first duty. Since that time he has

served on different types of Naval vessels. Before reporting to the Receiving Station, he was stationed in San Diego.

While on board ship, Nieto was noted for his cake baking for holidays and birthdays of the crew.



BUSMAN'S HOLIDAY — Studying culinary techniques in off-duty hours led to a first prize at National Hotel Exposition for James Nieto, CS2.



PREPARATIONS for meeting oiler keep the crew busy.

Sea-Going *Regulus*

NAMED FOR THE LARGEST and brightest star in the constellation Leo, *uss Regulus* (AF 57) is not a glamorous ship. Her crew's duties are largely routine with much of it involving stevedoring that can be a dangerous task when replenishing at sea in foul weather.

However her crew finds solid compensation in the knowledge that provisioning ships are vital to the U.S. Navy's ceaseless task of providing power for peace.

This floating food shop carries more than a million dollars worth of provisions in its four holds. *Regulus* carries about 290 items of chilled, frozen and dry provisions during her cruises out of NSC, Oakland, for distribution to the Seventh Fleet throughout WestPac, the China Sea, and Far Eastern ports. The contents of her refrigerated cargo capacity which would fill about 100 railroad cars, include enough potatoes to feed her crew for 13 years and enough coffee to make 1,650,000 cups.

Handling cargo on the high seas demands the kind of skill and training that *Regulus* men have plenty of. Tossing and rolling seas could play havoc with lines, nets, and cargo endangering ship and crew if all hands were not alert and capable. These reefermen waste no time in coming across with the goods. Their motto is to satisfy the customer and not to keep him waiting.



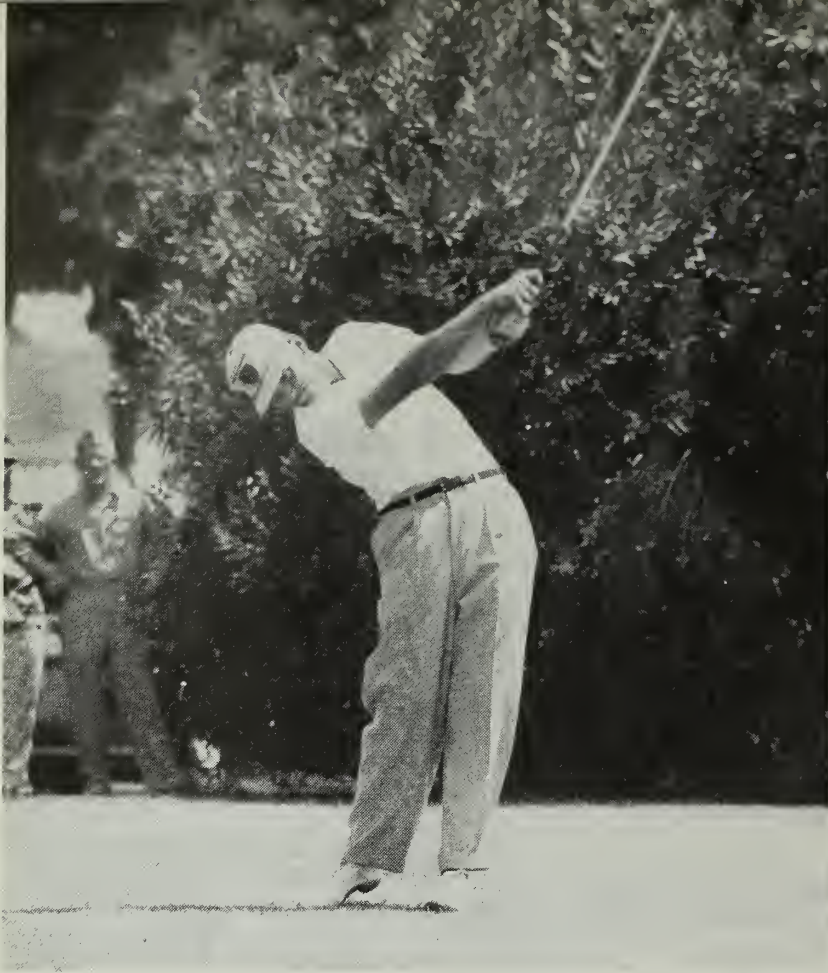
'HEADACHE BALL' on cargo hook calls for careful handling. Below: 20-foot waves give reefermen hard time.



TRAINING pays off. Cargo handlers practice with training ship at Freight Transportation School, NSC, Oakland.



Here's A



"A PERFECT GAME! Wow! It's something that happens only once in a million times." That's how Stanley W. Pointek, ADC, USN, expressed himself when he reached the pitcher's pinnacle by tossing a perfect—no-hit, no-run, no-man-reach-first—softball game.

A windmill right-hander with a Babe Ruth chest, Chief Pointek pitches a ball so fast you think it's jet-propelled. He doubles as player-coach for the NAS Pensacola "Goslings" and is undoubtedly the winningest pitcher NABTC has ever produced.

Stan Pointek has pitched more than 12 no-hitters in the last 20 years. His perfect game, however, tops all of his sports deeds to date. He accomplished that feat in June 1957 when he did not give up a single hit or walk, and allowed none of the 21 NAAS Ellyson batters he faced to reach first base.

For his one-in-a-million hurling chore, Chief Pointek was presented, on behalf of the Chief of Naval Personnel, a perfect-game trophy. He is one of more than 215 Navymen to receive trophies as a result of the Navy's policy of recognizing outstanding athletic feats.

In February 1956, ALL HANDS published a story and list of the first 76 Navymen who had received Athletic Achievement Trophies since the awards program went into effect. The Chief of Naval Personnel inaugurated his Athletic Achievements Awards Program in October 1954 "to further the interest in the Navy Sports Program and to recognize officially the man performing such an outstanding athletic feat."

Since then, the number of trophies presented has jumped to more than 215. They are being handed out at the rate of one every five days. Of the trophies presented to date, three

Pitching Prize



of them are for no-hit, no-run baseball games; 15 for bowling—five for "300" games and 10 for 700 series; 170 to golfers who scored a hole-in-one; and 27 for perfect, no-hit, no-run, no-man-reach-first softball games.

Of the 27 perfect softball games, perhaps the most outstanding performance recorded was that by Dave Ball, SDC, usn, of NAS Patuxent. While pitching for VR-1, the 37-year old hurler struck out 20 of the 21 batters he faced to score a 5 - 0 shutout over VR-22. Just a month later, in the 1956 ComAirLant Softball Tournament at Norfolk, Chief Ball was again on the ball as he struck out 15 ComFairJax batters to register his second perfect game.

Chief Ball, however, is not the only Navyman to pitch more than one no-hit, no-nothing softball game. I.C. Green, BM2, usn, has three perfect games to his credit, and three sparkling trophies from the Bureau to prove it.

Irv Green pitched his first perfect game back in May '55 when he was on the mound for the San Diego Naval Station "Zippers." He fanned 18 batters to shut out *uss Piedmont* (AD 17), 13 - 0. He earned his second Sports Achievement Trophy just 27 days later when he struck out 19 Camp Elliott batsmen. Green blanked NTC San Diego by a score of 7 - 0 in June 1956 for his third perfect game. In that one, 19 NTC hopefuls went down swinging.

Although not having any perfect games last year, Green racked up a record that's hard to match. While playing at Pearl Harbor for the Pacific Fleet Service Force, he pitched every game the Packers played and led them to the Hawaiian Inter-Service Softball Championship. Sporting a 28 - 8 won-loss record for the 1957 season, Green yielded but 14 earned runs in 263 innings of league play.

While Green leads the field with three perfect games, Leo Pitch, AD1, usn, R. G. Trostel, YNSN, usn, and Chief Ball each have two 4.0 games to their credit.

Pitch, who does just what his name implies, tossed his first perfect game on 8 May 1956 and his second, just four days later while hurling for the "Flyers" from NAS Agana,

Rundown on Navy Awards

Guam, in the ComNavFor Marianas Softball League.

Trostel won both of his awards in May-June 1955 while he was a team mate of Green, playing for the San Diego Zippers. He scored his first perfect game by whiffing 17 to shut out NavCommSta, 10 - 0. His second was the result of a 17 - 0 win over uss *Piedmont*.

Chief Ball holds the strikeout record with 20 out of 21; Green is next with 19 out of 21 in two perfect games and 18 in his third; TSgt John L. Watkins, usmc, and Robert D. Clason, CD3, usn, are also credited with 18 strikeouts in the perfect games for which they won their Achievement Awards.

One of the most recent Navymen to receive the 4.0 softball game award is Henry C. White, HM1, usn, who is assigned to the Naval Hospital at Newport, R. I. He hurled his 4.0 game by downing the Officer Candidate School in the Newport Naval Base Intramural League by a 4 - 0 score. Before tossing his trophy-winning game, White had pitched four nearly perfect games. Winning them all, he averaged 12 strikeouts a game. In the four games before his perfect one, he had three one-hitters and a two-hitter.

To date, only three Athletic Achievement Awards for baseball have been presented. They were

awarded on the basis of no-hit, no-run games. The first went to Ronald Dean Kihega, SN, usn, of NAS Atsugi, Japan.

Orland Gray Meeham, SA, usnr, won the second when he was on the mound for the NTC San Diego Blue-jackets on 21 Jul 1956 as they pounded out a 17 - 0 victory over their arch-rivals, the San Diego Marine Corps Depot.

Facing only 29 batters, big Bud Meeham, who has a contract with the Boston Red Sox, whiffed 10 Marine batsmen. He walked two, and a third man reached first on an error.

The only other no-hit, no-run baseball trophy issued so far, went to Richard J. Irvine, AN, usn, of NAS Norfolk, for his performance in September '56 against the Norfolk Naval Station nine. Of the 30 players he faced, only two men reached first—one on a walk and the other on an error.

When it comes to bowling, 1956 was a record year for Navy keggers. Four perfect games and nine 700 series were rolled after 15 months elapsed without an Achievement Award being presented for bowling.

William E. Darton, HMC, usn, of the Naval Hospital Corps School at San Diego, was the first to break the ice when he bowled a 244, 246 and 213 for a total of 703 on 15



Golfing Goal

Feb 1956. Anthony G. Amptnam, SN, usn, rolled a 247, 203 and a 277 for a 727 series on 11 May 1956 at the U.S. Naval Station, Kodiak, Alaska, to be the second man to receive an Achievement Award for bowling.

The first to receive a 300 game trophy was Enoch F. Miller, PNC, usn, of the staff, Com13. He bowled his perfect game at Seattle's Green Lake Bowl on 10 Jul 1956.

Chief Miller claims he had a somewhat tender thumb that night as he had bowled in the 40-Game Endurance Classic at Ogden, Utah, the week before. In the first of his three game series, he rolled a 189. "The tenderness was gone by the start of the second game," he said, "but after seven consecutive strikes, the thought of a 300 game was too much for me. It caused enough tension that the first ball of the eighth frame left a 6-7-10 split." With his perfect game ruined, Miller went on to pick up the split and mark again in the ninth and tenth frames to finish with a 254.

He started the third game off with a bang and as Miller put it, "the first seven balls were good pocket hits. You couldn't ask for anything better. Again I was confronted with the 'exasperating eighth.' Trying to relax, he took a cold drink but all he could think of was the split in the eighth frame which ruined his last game. Resolving to remain relaxed, he let his eighth ball go. It crossed over to the "Brooklyn" side but still carried without hesitation.

After conquering the troublesome eighth frame, Miller felt confident again and placed the ninth and tenth balls right in the pocket. "The 11th, however, had me sweating again."





Bowling Booty

he said, "but luck was with me. I had a thin 'Brooklyn' hit with sweep-er action which left most of the pins laying on the alley. After brushing the dust off my knees, I delivered the 12th ball. I was sure it would be a strike from the time it left my

hand." It was, and Chief Miller became the first Navyman to become eligible for the coveted Achievement Award for bowling a perfect "300" game.

Since Miller proved it wasn't impossible, B. E. Haytcher, CTSN, usn, of NavSta Sangley Point, P. I.; William H. Coldiron, DT3, usn, of ComServPac; LCDR Gabriel J. Gamache, usnr, of NavSta Key West, Fla., and Warren H. Gonyea, YN1, usn, of NavSta San Juan, P. R., have rolled "300" games and received trophies from the Chief of Naval Personnel in recognition of their feats. Haytcher also received a 700 series award as he rolled a 244 and 174 along with his 300 for a total of 718 in the three game series.

Joseph Nagy, YN2, usn, of the Service School Command, NTC San Diego, is the proud possessor of three Achievement Awards for bowling three 700 series. He rolled a 701 on 14 Aug 1956, a 711 on 17 Oct '56, and a 729 on 11 Dec '56. His highest game was a 277.

A member of the NTC San Diego varsity bowling team, Nagy has been bowling for a number of years. In

1952, before the Awards Program was established, he rolled a 300 game and a 762 series at NAS Lakehurst, N. J.

Now that Navy keggers have found the pocket, and pitchers continue those "one-in-a-million" hurling chores, golfers in blue continue to do right well for themselves as they live up to Bobby Jones' classic: "If golf is worth playing, its worth playing right."

And play right is just what a good many Navy golfers do. If the old saying about from tee to cup in one stroke is a test of golfing accuracy, then the Navy can boast of nearly 170 golfers who play the game "right." Proof of that claim is the 170 hole-in-one trophies the Chief of Naval Personnel has awarded to Navy golfers since the Athletic Achievement Awards Program began in October 1954. 80 of them were in 1954-55 and 67 in 1956.

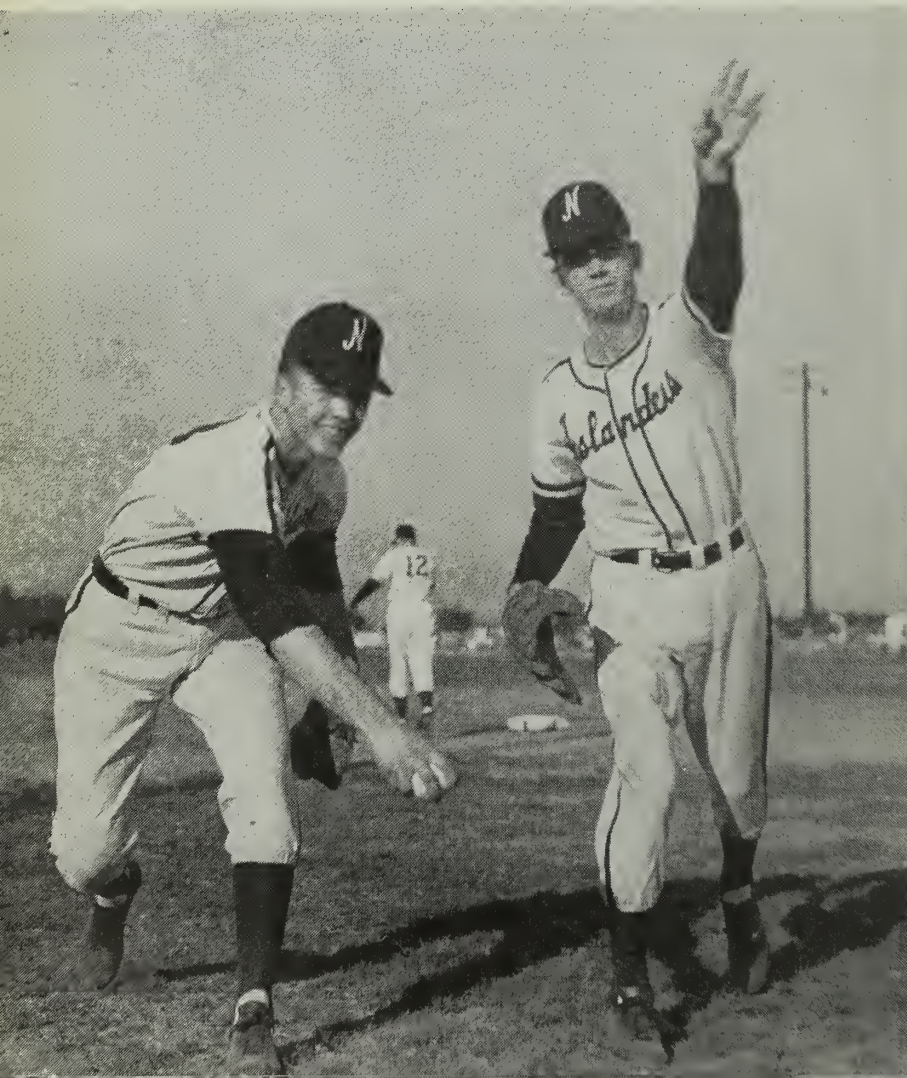
To date only four Navy men—Lambert A. Wight, ADC, usn; CDR W. W. Moore, (CEC), usn; CAPT Benjamin N. Ahl, (MC), usn; and John L. O. Barker, GMC, usn, have been awarded two hole-in-one trophies each.

A 335-yarder by Billy E. Golden, HM2, usn, is the longest ace recorded. He made his perfect long-shot on the par four, number four hole at the Eagle Haven Golf Course at NavPhibBase Little Creek, Va. Golden, who is now assigned to the Bethesda Naval Hospital, Washington, D. C., wound up his game with an 18 hole score of 74.

Sad but true, the shortest hole-in-one recorded to date was an 80-yard ace scored by LCDR John F. Hanlon, usn, at the Presidio Hills Golf Course in San Diego. Eighty yards or 335, the shortest is still a hole-in-one and counts no more nor less than the longest.

Hard to believe, but true, are the holes-in-one made by CDR Robert A. Stalter, (MC) usn, and LT Joel E. Ross, (SC) usn. They both made their aces while playing in a two-some on 18 Feb 1956 during the Championship Golf Tournament at NavSta Trinidad, B.W.I.

Here, in CDR Stalter's own words, is how he scored his hole-in-one: "Using a seven iron, I shot from the number three tee. The green is 144 yards away. My ball veered to the left of the green, hit a tree and bounced back on the green. . . . We did not see my ball on the





SOFTBALL PITCHERS can earn same trophy as hardball hurlers with a no-hit, no-run, no-man-reach-first game.

green so I assumed that it went beyond it. As I was looking for it, LT Ross looked into the cup and then at me. He called me over and much to my surprise, there resting in the cup was my ball."

LT Ross, on the other hand, made a straight shot which hit short of the green and didn't need the assistance of a tree to make his hole-in-one. He scored it on the seventh tee with a six-iron. Although his drive landed short of the 147 yard pin, it bounced and rolled onto the green and into the cup.

Requests for hole-in-one trophies come into the Bureau of Naval Personnel in a number of different forms. Some are formal; others are first hand accounts. Some are written in a humorous vein.

Pershing J. Vezinat, HMC, USN, had been playing golf for only one year and four months, when he already had three holes-in-one to his credit. Chief Vezinat, who was assigned to the Cairo Office of the U.S. Naval Attache, sent a statement to the Bureau when applying for his award which read:

"This is to certify that on Sunday morning, 31 Jul 1955, Pershing J. Vezinat made a hole-in-one on hole number one at the Maadi Sporting Club, Cairo, Egypt. This hole is 252 yards long, having a clump of trees in the middle of the fairway between the tee and the green. He used a number four wood."

It was signed by:

Shabaan Salama, Caddie;

Libad Hassan, Caddie;

Mohammed Aslag, Green Keeper;

El-Shiekh Hussien Hassan, Golf Pro and Green Instructor.

Other than the above statement which was written in Egyptian, and another in the form of a court martial, one of the most unusual requests for hole-in-one trophies received to date was that from CDR Joseph C. McKinney, USN, who is assigned to the Headquarters, Continental Division of MATS at Kelly Air Force Base, Texas. He submitted his request in the form of an Aircraft Accident Report. It read:

Report of an Accident

(Editor's Note: At least he's honest)

- a. Place: San Antonio, Texas
- b. Scene of accident: Kelly Golf Course, number eight (8) hole
- c. Date: 21 March 1957
- d. Weather: Clear
- e. Wind: North, 15 knots
- f. Obstructions: Trees and bunker left, sand traps left and right of green.
- g. Direction of flight: North
- h. Distance: 170 yards
- i. Altitude: Approximately 50 feet
- j. Terrain: Grassed, no rock and rolling

Here's How to Qualify for Athletic Achievement Awards

The regulations and eligibility requirements for the individual Athletic Achievement Awards presented by the Chief of Naval Personnel are not published in any BuPers Instruction or Notice. They are, however, published periodically in the *Special Services Newsletter*. Since that publication has limited distribution and the guide lines governing the eligibility for the Achievement Awards were changed on 1 Oct 1957, here's an up-to-date summary of them:

- **Eligibility**—All naval officers and enlisted personnel except NROTC students and USNA midshipmen on active duty for 90 days or more are eligible.

Appropriate engraved trophies will be presented to Navymen for individual accomplishments in baseball, bowling, golf and softball in accordance with the following requirements:

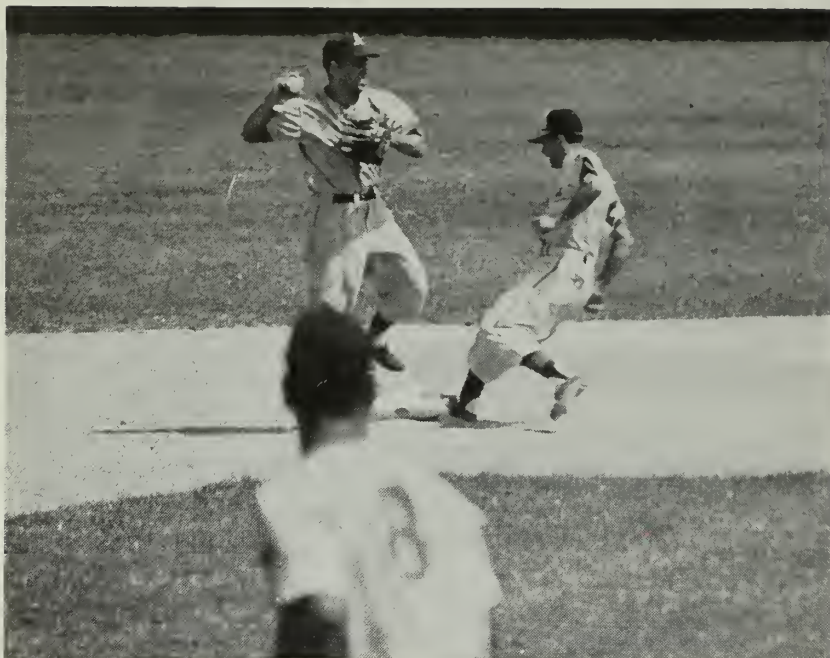
- **Baseball**—For pitching a no-hit, no-run game during a scheduled game. Requests should be forwarded to the Chief of Naval

Personnel via your commanding officer. An authenticated copy of the score sheet should accompany each request.

- **Bowling**—For rolling a "300 game" or a "700 series" (scratch) in ten pins. Forward your request properly attested by your team mates or opponents, and an official of the bowling alley, to the Bureau, via your commanding officer.

- **Golf**—For making a "hole-in-one" on a regulation golf course. (A regulation course is defined as one having no more than five par three holes out of the 18 holes.) Requests should be forwarded to the Bureau, via your CO, along with the score card properly attested by your playing partners and the course professional.

- **Softball**—For pitching a no-hit, no-run, no-man-reach-base game during a scheduled game. Requests should be forwarded to the Chief of Naval Personnel via your commanding officer. An authenticated copy of the score sheet should accompany each request



TEAM WORK, a good pitching arm and a dash of luck are the ingredients that go into the making of Navy's trophy for pitching no-hit no-run game.

- k. Weapon used: Number Six (6) Iron
 - l. Point of Impact: Approximately 165 yards from point of take-off
 - m. Skid marks: Approximately 15 feet in length, extending from point of impact to the cup of number eight green.
 - n. Damage to equipment: none
 - o. Damage to personnel: none
- Remarks: Since the individual concerned has not been involved in a similar accident in the past, it does not necessarily indicate a trend in this direction.

CDR McKinney's "report" was endorsed by the Senior Naval Officer at Kelly Air Force Base. His forwarding endorsement read: "Action has been taken requiring CDR McKinney to use a nine iron on all short holes hereafter which should take him out of the accident-prone class."

To give credit where credit is due, below is a list of the Navymen and one dependent, who received Achievement Awards since the earlier winners were announced in the February 1956 issue.

— H. George Baker, JOC, USN.

BASEBALL

(No-hit, no-run game)

Ronald Dean Kihega, SN, USN
Orland Gray Mecham,
SA, USNR

Richard J. Irvine, AN, USN

BOWLING

(300 game or 700 series)

William E. Darton, HMC, USN
(700 series award)

Anthony G. Aptmann, SN, USN
(700 series award)

Enoch P. Miller, PNC, USN
(300 game trophy)

Mike Connolly, YN2, USN
(700 series award)

B. E. Haytcher, CTSN, USN
(Two awards - a 700 series
award and a 300 game
trophy)

Eugene C. Prince, PNC, USN
(700 series award)

William H. Coldiron, DT3, USN
(300 game trophy)

J. B. Amgwert, HMC, USN
(700 series award)

LCDR Gabriel J. Gamache,
USNR (300 game trophy)

Joseph Nagy, YN2, USN
(Three 700 series awards)

Michael M. Ganitch, QMC, USN
(700 series award)

Warren H. Gonyea, YN1, USN
(300 game trophy)

SOFTBALL

(No-hit, no-run, no-man-reach-
first)

Irv C. Green, BM2, USN
(Third award)

Leo Pitch, AD1, USN
(Two awards)

Tony D. Ortega, SH2, USN

TSGT John L. Watkins, USMC

Frederick Faison, HM1, USN

Stanley M. Framstad, AD3,
USNR

John W. Koerber, MNC, USN

Kenneth E. Smith, AK1, USN

Robert Dean Clason, CD3, USN

Glen Collin Mongeon, AM1,
USN

Charles R. Breyman, HMC (SS),
USN

Dave Ball, SDC, USN

SSGT Robert C. Kendrick, USMC
Victor Oosterbaan, AT2, USN

Jerry T. Walker, AN, USN

Leland P. Whelan, EN1 (SS),
USN

ENS Charles E. Horton, USNR

Stanley W. Pointek, ADC, USN
Henry C. White, HM1, USN

GOLF

(Hole-in-One)

LCDR Carl W. Coe, USN

CDR Frank N. Shramer, USN

H. E. Hoover, PNSN, USN

LTJG S. C. Peake, (MSC), USN

LT Joseph L. Elwood, (SC), USN

John L. O. Barker, GMC, USN

(Second award)

LCDR Donald F. Schug, USN

CAPT E. B. Ellsworth, Jr., USN

CAPT A. J. Barrett, Jr., USN

Max S. Fonseca, SO1, USN

Billie Van McIntyre, CS1, USN

CAPT Jamie E. Jones, USN

CAPT Eugene C. Rider, USN

CDR Erwin W. White, (MSC),
USN

LCDR J. E. Larson, (SC), USN

LTJG John D. Byerley, USNR

LCDR James J. Marta, USN

LT Malgum E. Whitt, USN

CDR E. R. Foster, (CEC), USN

LCDR Ray E. Novelli, USN

Anthony E. Zinni, ADC, USN

LT Joseph G. Nemetz, USN

Frank J. Finocchio, PNC, USNR

Frank E. Kirkwood, CT1, USN

CDR R. A. Stalter, (MC), USN

LT Joel E. Ross, (SC), USN

CDR Jack L. Stowe, USN

Frank W. Bussing, HM2, USN

Pershing J. Vezinat, HMC, USN

LT John A. Widman, (CHC),
USN

LCDR Robert Q. Wallace, USN

W. P. Horton, DT3, USN

G. R. Soukup, HMC, USN

R. H. Spring, DTC, USN

Henrik Volkman, ETC, USN

CDR D. A. Henning, USN

MSGT Charles B. Griffin, USMC

LTJG Earl C. Lee, USN

LTJG Will T. Lynch, USNR

Virgil D. Youmans, SO1, USN

LCDR W. M. Morgan, USN

Marvin A. Sylvester, HMC, USN

Victor J. Martin, AD2, USN

Raymond O. Wagner, AOC, USN

CDR Samuel R. Wideberg, USN

R. W. Lambert, ETC, USN

James I. Wagoner, HMC, USN

CAPT A. B. Dickie, USN (Ret.)

John J. Keimig, DKC, USN

CAPT D. W. Boone, (MC), USN

Michael DeParis, SHC, USN

William C. Mills, AMC, USN

Robert Prichett, Jr., SKG3,
USNR

Elmer J. Rago, EM1, USN

Kendel C. Jorges, PN2, USN

CDR Carl A. Prince, (SC), USN

William J. Little, MN2, USN

CDR Floyd Loomis, (SC), USN

LCDR John J. Wohlschlaeger,
(SC), USN

CDR R. J. Beltinger, Jr., USN

LT. W. O. Upton, Jr., USN

CDR H. M. Thompson, USN

CDR Hal C. Rockett, USN, (Ret.)

Benjamin R. Quiroz, HMC, USN

LT Charles A. Banks, USN

Forest G. Smith, AT1, USN

LCDR Robert E. Warner, USNR

LCDR H. C. Gwynne, Jr., (SC),
USN

CDR E. H. Bayers, USN

CAPT Maurice Ferrara, USN

LCDR E. M. Wieseske, SC, USN

Gordon S. Gray, AMC, USN

Henry T. Nugent, BTC, USN

LTJG R. L. Christopherson,
(CEC), USNR

Eric D. Maiefski, SKC, USN

Bertram D. Howard, MM2, USN

CDR E. P. O'Neill, (SC), USN

LCDR Arthur LaPointe, USNR

CAPT J. W. Gustin Jr., (MC),
USN

Frank J. Goss, TD2, USN

Johnnie Savina, YN1, USN

Mario E. Alarcon, RM1, USNR

CDR J. B. Mongogna, USN

E. C. Harris, SK3, USN

CDR J. C. McKinney, USN

CDR Chambers L. Anderson,
(MSC), USN

ENS James I. Myers, (MSC), USN

LCDR R. E. Graham, (SC), USN

CDR R. A. Lindsey, (SC), USN

LCDR Woodrow C. Manley,
(MSC), USN

Mrs. Lucille Brown

Wife of LT Stanley W. Brown,
(MSC), USN

CDR Walter J. Heison,
(MSC), USN

CDR Harvey J. Smith, USN

CAPT P. B. Moore, USN (Ret.)

LTJG David H. Kester, USNR

Training for Reservists

Drilling Reservists at eight Naval Reserve Training Centers will have nine more coastal minesweepers to add to their fleet of three. These ships are actually classified as training devices and are maintained by Reservists who use them for practical training alongside on drill nights and in making short cruises on weekends.

In addition to giving Reservists a chance to put into practice the procedures they have learned on mock-ups and synthetic training devices in the Centers, the minesweepers will add spirit and interest to what would otherwise be routine training.

Ships and the Training Centers to which assigned are: *Crackle* (MSC(O)-13), Providence, R. I.; *Grouse* (MSC(O)-15), Portland, Me.; *Lorikeet* (MSC(O)-49), Naval Shipyard New York (for use of Reservists at all NRTC's in the New York City area); *Linnet* (MSC(O)-24), Philadelphia, Pa.; *Redpoll* (MSC(O)-57), Charleston, S. C.; *Siskin* (MSC(O)-58), Buffalo, N. Y.; *Reedbird* (MSC(O)-51), Portland, Ore.; *Robin* (MSC(O)-53) and *Ruff* (MSC(O)-54), Seattle, Wash.

Those already in use during the trial program are: *uss Plover* (MSC(O)-33), Philadelphia, Pa.; *Turkey* (MSC(O)-56), Toledo, Ohio; and *Fulmar* (MSC(O)-47), Rochester, N. Y.

Authorization by the Chief of Naval Personnel allows District Commandants to assign Naval Reserve officers on inactive duty as commanding officers of these ships for short cruises.

The only officers who may become skippers of these ships are those who are currently assigned to a Naval Reserve pay unit under voluntarily accepted Inactive Duty Training Orders issued by the Chief of Naval Personnel and who are expected to be available for mobilization in a sea-going billet.

Forerunner of these ships to be used on a trial basis was *Fulmar*. She was turned over to the commanding officer of the Naval and Marine Corps Reserve Training Center at Brooklyn, N. Y., on 13 Dec 1956.

During the time *Fulmar* was alongside she was used for officer qualification cruises and for team training of enlisted personnel.

SIDELINE STRATEGY

TODAY, MORE THAN EVER before, you see a great many youngsters playing with a bow and arrow. But archery isn't just kid stuff. You'll find junior laying aside the sling shot or six-shooter in favor of the tools of Robin Hood usually because he's following dad's or even mom's footsteps.

Archery is fast becoming a favorite American pastime. According to a recent poll, it's the nation's tenth most popular sport. Archery ranks just behind golf and tennis. Last year, there were more than 4,600,000 active bowmen in the U.S. And from the increasing number of archery ranges you'll find at naval installations, you can be assured that a good percentage of these active archers are Navymen and their dependents.

You'll find more archery enthusiasts at NAS Norfolk and nearby Oceana than you can shake an arrow at. At Green Cove Springs, Fla., and Aiea Heights, Pearl Harbor — to name but two of the many Navy archery ranges — you'll also find sturdy shafts whistling into targets.

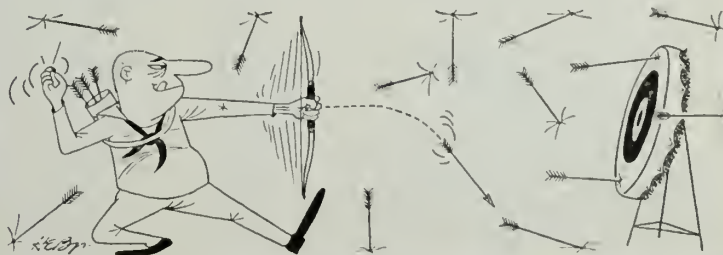
NAS Oceana boasts of one of the most active bowman clubs in the Navy. Members of the club—which number well over 100—represent a national and international cross section. Its membership includes members of all branches of the armed forces, as well as civilians and servicemen from NATO. The year-old range at the master jet base was laid out and cleared of underbrush by the voluntary labor of club

members. It features an instruction course and an American Field Archery Association sanctioned tournament course which is the scene of many state and national archery club meets.

At Green Cove, a newly organized group of Robin Hood strikers is headed by CHMACH R. H. Cassidy, usn, who has been a master of the bow since he was no taller than an arrow. Special Services supplies bows, arrows, targets and other accessories for those who do not have their own equipment. (Archers pay anywhere from \$30 to \$80 for a good bow while arrows usually run from \$9 to \$27 a dozen.) Good archers usually prefer to make their equipment.

There are three kinds of archery—target, field and hunting. In target archery bowmen use sights and shoot from set distances. In field archery, no sights are used and the archer shoots—at targets up to 80 feet away—instinctively and usually under conditions encountered while hunting in the woods. One Navy field archery range even has targets resembling animals, which require different shots at various distances.

Hunting archery is the actual stalking of game as Robin Hood and Little John did in Sherwood Forest. Hunting season will be over in most states by the time you read this, but if you plan to do some hunting next year, be sure you have a license and check local laws as they vary from state to state.—HGB



Brief news items about other branches of the armed services.

MODELS OF MINIATURE rockets are being used in a series of tests for the Air Force to find better protective coatings for flame deflectors on missile test stands.

The steel flame deflectors that now divert rocket exhaust during *Atlas* missile launchings are water-cooled. The present tests are aimed at finding materials with which *Atlas* test stand flame deflectors could be coated. A material that would withstand the intense rocket engine heat could be used as a protective coating for steel and minimize the need for large water storage and handling equipment at test bases.

The small rockets burn gasoline and gaseous oxygen. They develop a chamber pressure of 700 pounds per square inch and produce an exhaust stream having a theoretical velocity of 8000 feet per second.

These miniature rocket assemblies are inserted into an air-free, high-altitude tank. Test samples of various flame deflectors, mounted at various angles, are exposed to the midjet blast for as long as nine seconds. The tests enable engineers on the ground to study the behavior of rocket exhausts at high altitudes.

★ ★ ★

A BULLDOZER CAB, designed to protect a driver from radioactivity while cleaning up the debris of an atomic explosion, has been developed by the Army Engineers.

Made of lead, the cab weighs about 5000 pounds. With a crane, three men can mount it on a tractor in 30 minutes. It conveniently accommodates the bulldozer operator, the tractor controls, a radio and special meters to show the amount of radioactivity in a contaminated area. Lead glass windows provide visibility on all four sides and the cab is pressurized with fresh, filtered air.

The cab has been successfully tested at Fort McClellan, Ala., and Yucca Flat, Nev., by the Special Projects Branch of the Army Engineer Research and Development Laboratories.



HOT SCOOP—A remote control tractor developed by the Army designed for use in radioactive and combat zones.



SUN HELMET—Solar batteries on the crown of the Army's helmet radio provide all the power needed for operation.

★ ★ ★

A GROUP OF AIR FORCE SPECIALISTS, taking part in a human engineering study of missile propellant-handling, have had their first taste of what operational conditions will be like at an intercontinental ballistic missile base.

Focal points of the study, which was conducted at March Air Force Base, Calif., were two electronic consoles designed to control fueling of *Atlas* ICBMs at operational bases. Through pushbuttons, and monitoring lights that indicate the opening and closing of valves, the consoles make it possible for an operator to fuel a missile with hydrocarbon and liquid oxygen propellants by remote control. Except for the arrangement of indicator lights the two consoles were identical. The main objective of the test was to find out which console was the most practical to use.

The flight engineers, petroleum supply specialists, aircraft mechanics and aircraft maintenance technicians assigned to the project were each given 14 practice runs on the equipment. During each run six "malfunctions" were inserted in the transfer system to test the individual's ability to monitor the indicator lights and understand the system.

Results of the study—the first of a series of tests—will be used to find the most effective ways of training uniformed personnel, to learn which personnel are best fitted for propellant-handling tasks, and to gain information on the best methods of preparing for an ICBM launching.

★ ★ ★

THE ARMY AND MARINE CORPS have adopted a new floating bridge, capable of supporting 60-ton loads, which can be set up at speeds at about 90 feet per hour.

Known as the M4T6, the bridge is made up of lightweight parts that can be carried by air. Its heaviest single component is a 750-pound, neoprene-coated nylon float.

The pneumatic "half-floats" join together to form a complete unit for use as a support at 15-foot intervals.

The road surface of the structure is made up of hollow aluminum alloy deck sections, less than 16 feet

long and weighing 225 pounds each, which are placed side by side in a staggered arrangement. Steel beams and plywood panels are used to provide rigidity and distribute the load to the floats.

Although the span can be put up by manpower at rates up to 1½ feet per minute, construction can be speeded even more through the use of newly developed bridge-building aids, such as a tilting-bed trailer.

The bridge was developed and tested by the Army Engineer Research and Development Laboratories, Fort Belvoir, Va.

★ ★ ★

THE ARMY IS EXPERIMENTING with the possible assignment of women soldiers to radar detection and tracking duties with antiaircraft artillery units and Nike guided missile batteries.

In a test program, underway at Ft. Meade, Md., WACs will be assigned to the previously all-male 25th AAA Brigade. If the test proves successful, additional WACs may be assigned to AAA and missile units throughout the United States.

According to Army officials, the only comparable assignment for its women soldiers occurred during World War II, when officers and enlisted women served in operational and clerical billets with two special composite AAA batteries.

★ ★ ★

THE OLD-STYLE WOODEN crate, developed during World War II to meet the hazards of wartime shipping conditions, has gone by the board.

In a project run by the Army Engineer Research and Development Laboratories, Fort Belvoir, Va., a redesigned military sheathed crate (still using wood) has been developed to reduce weight, cut cost and simplify construction. At the same time most of the ruggedness of the World War II box has been retained.

Tests of the new crate indicate at least a 25 per cent savings in weight, cost and material when the Armed Forces begin using the improved package.

The new design features an all-purpose top with small joists, a new base and lighter sides and ends.



MOTHER LODE—An Air Force B-29 drops a test vehicle used in the development of new ramjet missile engines.



HOT SHOT—Supersonic folding-fin aircraft rockets are fired by a *Delta Dagger* at Holloman Air Force Base.

★ ★ ★

NEW LIGHTWEIGHT FLIGHT gear that will give supersonic pilots greater safety, more mobility and increased comfort and chances to survive is being developed by the Air Force.

The redesigned flying suit combines into one three-piece suit the five garments necessary for waterproofing, warmth, cooling and pressure. The suit will float the pilot face-up, even when unconscious, with full gear and in cold water, without undue exposure. It will, furthermore, decrease the bulk of equipment which in turn provides greater comfort and reduces drag in the event of a supersonic ejection from the aircraft.

In addition to the suit itself, helmet, gloves and boots have also been redesigned. The new helmet is structurally stronger and will give the pilot increased visibility and freedom of head movement.

The gloves, made in two parts, pressurize the backs of the hands only, leaving the fingers with the desired dexterity and mobility.

Flight boots have been so designed that they may be fitted to the wearer's foot by means of lacing after which they may be put on or removed merely by zipping them open and closed. Their ability to float will enable the pilot to keep the boots on after ditching a plane over water.

★ ★ ★

A NEW BUG-KILLING WEAPON, a pushcart-mounted insecticide mist sprayer, has been developed for the Army by the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va.

The sprayer is primarily designed for use in normal insect control operations by preventive medicine companies, medical service organizations and post engineer personnel. However, it could also be put to non-military use at open air theaters and other night gatherings and around such places as dairy barns, stockyards, garbage dumps, sewage plants and summer camps.

Essentially, the sprayer consists of a gasoline engine, air compressor, insecticide pump and insecticide tank, all mounted on a common base which can be carried on a two-wheeled pushcart. Where the terrain is too rugged for a pushcart, the base-mounted unit can easily be removed and mounted on a jeep or light truck.

THE BULLETIN BOARD

Navy to Train 500 EMs a Year in Science

Up to 500 officers drawn from enlisted grades and trained in the field of science will be added to the ranks of the Navy and Marine Corps annually, under the educational program announced last month by the Secretary of the Navy, Thomas S. Gates, Jr.

Beginning with the school year 1958-9, the first enlisted men entering the program will be enrolled in civilian institutions of higher learning for training in the field of science. Details of the program have not yet been completed, and the names of the colleges and universities which will participate are not yet available.

Navy Football Win over Army Boosts Memorial Stadium Drive

Navy's 14-0 victory over Army's scrappy football squad in November not only cinched the Cotton Bowl appearance for the sharp Annapolis Midshipmen, but also cinched another \$100,000 for the Navy-Marine Corps Memorial Stadium Fund. This amount or more is expected to be the Navy's end of the Bowl proceeds and will be added to the Fund for the new stadium at Annapolis.

On 1 December total funds contributed to the Stadium amounted to \$930,000. \$1,170,000 more is needed.

USS *Lake Champlain* (CVS 39) forged ahead of all afloat units by increasing her contribution to over \$7000. Submarine Squadron Three became the first squadron to average over \$2.00 per man. Contributions are generally picking up from shore stations. Spring carnivals can put the fund close to the goal.

Bids for construction are now out. Decision has been made to build the complete stadium. The Memorial must reach the goal by July 1959.

This is an outgrowth and expansion of NEASP—the Naval Enlisted Advanced School Program. An article on training under NEASP appears in the September 1957 issue of *ALL HANDS* (pp. 16-19). Most recent directives on the NEASP program were discussed in the December 1957 issue, page 52.

Announcement of the mental and physical requirements and other aspects of the new educational program will be made in the near future.

Emphasis in the studies will be placed on mathematics and the physical sciences. It is anticipated that during summer vacation periods, the students will be assigned to Navy laboratories and other scientific establishments to study application of the sciences.

Selection of enlisted men for this higher study will be on the basis of intelligence and character rather than on prior educational status.

Students will receive the pay and allowances of their rates while attending college. The Navy Department will pay the costs of their education. They will be required to remain on active duty for a specified period of obligated duty after completion of training.

Naval officers and civilians experienced in the field of education will participate in the selection process. Those selected will be enrolled in colleges and universities subject to the rules of the institutions concerned.

Tax Deadline Near For Texas Voters

If you're from Texas and plan to vote in the 1958 elections, you must pay the state poll tax before 31 Jan 1958.

The state poll tax is \$1.50 and some counties and cities also levy a tax.

For information on a specific locality, write to the County Tax Collector, county of residence, requesting application form for payment of the state's poll tax.

Revised Tuition Aid Program Enables You to Study Courses Helpful To Your Career

The Tuition Aid Program has been revised to give the Navy a better return on the money invested in it.

From now on:

- Enlisted men must be serving on at least a second enlistment in order to be eligible for tuition aid.

- Courses taken on the graduate level under the program will be limited to study in one (or two) of the following fields—mathematics, physical science, international relations and management.

- Funds will not be available for study on a high school level.

- Tuition aid will not be granted for college undergraduate courses *except* those which are part of a program leading toward a *first* baccalaureate degree.

- And, when a student withdraws from a course (unless he does so for reasons beyond his control) he will have to repay the money the Navy has put into the incompleting course.

Except for these changes, and a provision that applicants for the program cannot be attending service schools, the revised program, covered by BuPers Inst. 1560.10A, remains about the same as the original one.

Allotments for use in the program will be furnished, as needs dictate and funds permit, to commandants of Naval Districts and certain force commanders. These funds will be spent for the partial payment of tuition for voluntary off-duty courses, taken with commanding officers' concurrence, at approved educational institutions. Only those courses which are taken for credit (including extension credit) will be approved. Correspondence courses are not covered by the program.

The student receiving assistance under the program must pay, out of his own pocket, at least one fourth of his tuition costs, plus all costs other than tuition. The Navy will pay the remaining three-fourths of the tuition costs, unless that three-fourths portion comes to more than \$7.50 per semester hour or \$5.00 per

quarter hour, in which case the individual must make up the difference. In other words, if the total tuition cost for a course were \$12.50 per semester hour, the Navy would pay only \$7.50 (or three fifths of the cost), while the student would have to pay the remaining two-fifths.

To be eligible for the program candidates have to be on active duty, either in the Regulars or the Reserves. They must be career personnel. (Officers must sign agreements to remain on active duty for two years after completion of a course and enlisted men must be serving on at least a second enlistment.) And, they must agree to repay the government for tuition paid in their behalf, if they voluntarily withdraw from a course or courses.

In most cases, there are three steps to be followed by an individual applying for the program.

First—Talk things over with your I & E Officer or other educational counselor concerning the course or courses best suited to your needs, qualifications and educational program.

Second—Apply for admission to the educational institution, or request a statement that you will be accepted. (This step may be omitted if the institution requires no formal admission procedures.)

Third—When you have been notified that you will be accepted, submit a request for approval of funds to the appropriate district commandant or force commander, via your CO. (For a sample letter of request see Enclosure 1 of BuPers Inst. 1560.10A.)

After you have carried out these steps, the rest is up to your CO and the district commandant or force commander concerned.

Pointers on Hospital Personnel Administration in New Course

A new correspondence course, **Hospital Personnel Administration** (NavPers 10734), is now available at the Naval Medical School.

This course is designed for Regular and Reserve officers and enlisted personnel of the Medical Department. The purpose of the course is to familiarize personnel with the basic principles of hospital personnel administration as applied to any industry, and related specifically to the

hospital industry, private or industrial, governmental or armed forces. It serves as an introduction to the primary areas of personnel administration which bear upon the special needs of naval hospitals and emphasizes the recognition of practical variations in personnel policy that are required by the particular situation.

The course consists of five assignments, evaluated at 15 points credit for purposes of Naval Reserve promotion and retirement.

Applications should be submitted on form NavPers 992 (Rev 10/54 or later), with appropriate change in the "To" line, forwarded via official channels to the Commanding Officer, U. S. Naval Medical School, National Naval Medical Center, Bethesda, 14, Md. For summary of enlisted correspondence courses see June 1956 ALL HANDS.

Rules and Requirements For Officers Assigned to Combat Information Centers

The Navy, in order to make sure its Combat Information Centers continue to keep pace with the latest developments in guided missile warfare, is taking steps to build up a hard core of experienced CIC and operation department career officers.

Among these steps are measures designed to help the Navy keep better track of officers with CIC and air controller backgrounds, a tightening-up on experience requirements for qualification as a CIC officer or an air controller, and improvements in CIC training for operations officers, such as the new staff-level course at the CIC Officers School, Glynco, Ga.

For some time now, the Chief of Naval Personnel has been ordering as many officers as practicable to the

WAY BACK WHEN

DDs Could Travel, Even in 1907

At 0833 on 6 Jun 1907, six torpedo-boat destroyers started abreast across an imaginary line drawn from the Sandy Hook light-ship on a 240-mile race to Cape Charles, Va.

Taking part were USS Whipple, 481 tons, trial speed of 28.24 knots; Truxtun, same tonnage, trial speed of 29.58 knots; Worden, 476 tons, trial speed of 29.86 knots; Hull, 449 tons, 28.04-knot trial speed; Hopkins, 467 tons, trial speed of 29.02 knots; Stewart, 439 tons, trial speed of 29.69 knots.

These ships represented the best of our destroyers. The latest and probably the most efficient of the six was Stewart. Her dimensions may be taken as representative of the 16 ships which composed the destroyer

Fleet in 1907. She was 245 feet long, 23 feet 1 inch in beam, and drew 6 feet, 6 inches at normal draft.

When they went across the starting line, each ship, judging from the blowing off of safety valves, was carrying a full head of steam. Although they were credited with trial speeds of from 28 to nearly 30 knots, it was not anticipated that they would average more than 22 or 23 knots over the whole course. This should have brought them into Hampton Roads at about 1800 the same evening.

At 1940, Worden crossed the finish line as the winner. Her time, taken by the American Fleet as she passed the Cape Charles light, was 11 hours and seven minutes, averaging 21.6 knots for the distance.

Worden was being closely pressed by Hopkins when suddenly, off Hog Island, Hopkins broke a propeller strut, and was completely disabled. The propeller thrashed around wildly and tore a hole in the after compartment. Hopkins had to signal for assistance. Her after bulkhead held, fortunately, as did her pumps, and with the aid of a line from Whipple, she was able to reach Hampton Roads at 0800 the next morning.

Up until the time of the accident, Hopkins and Whipple had averaged more than 21.6 knots.

It took Hull 16 hours, Stewart 21, and Truxtun 22 hours to cover the 240-mile course.



CIC Officers School. However, the capacity of the school is limited and its graduates need further training and practical experience before they can be considered fully qualified CIC officers. For that reason, the COs of ships and aircraft squadrons to which these graduates are assigned are being reminded that it's their responsibility to make sure these officers get the necessary training and experience, and also, to see that non-school graduates have an opportunity for CIC training.

In addition, the COs of ships and units required to control aircraft are being cautioned to make sure that personnel assigned to control functions are properly qualified. Except under circumstances of actual necessity, only formally designated air controllers are to control aircraft without supervision. The procedures leading to such a designation are as follows:

First—The candidate must demonstrate to a qualified air controller his proficiency in the various types of intercepts and show that he has a thorough working knowledge of all items listed in article 110 of NWIP 31-3.

Second—The examining air controller submits a written statement to the candidate's CO, indicating the demonstrated degree of proficiency and knowledge and including his recommendation as to whether or not the candidate should be designated an air controller. The intercept pilot or pilots employed during the qualification intercepts will also prepare an evaluation of the candidate's work, which will be submitted along with the examining air controller's statement.

Third—Based on the results of these demonstrations, the candidate's CO will, if he considers the candidate thoroughly qualified, write a letter to the individual concerned, designating him an air controller. The original letter will be included in the individual's service record and a copy of it will be forwarded to the Chief of Naval Personnel.

Once an individual has been designated an air controller, that designation will remain valid (regardless of changes of duty station) until there is a break of more than one year in his service in that capacity, in which case he would have to be requalified

and he would also be redesignated.

Because of continuing changes in CIC techniques, procedures, doctrine, tactics and other related matters, CIC officer qualifications will no longer remain valid indefinitely. Thus, for other than air controller qualifications, an officer previously qualified in CIC, but disassociated from it for four years or more, will have to undergo refresher training and/or a suitable operating period in

What About Your Designator —Is It in Your Record?

If you are an enlisted man and are qualified in submarines, you are reminded to use the "SS" designation after your name.

The SS designator should always be used in official correspondence, orders, availability reports, Personnel Accounting System, Shorvey and Seavey Data Cards, requests and, by all means, in your service record.

If you are serving ashore or with afloat units other than the Submarine Forces, you won't be able to return to submarine duty if you do not carry your SS designator.

If, for some reason, your designator has been dropped unofficially, you should check with your local command and ask that it be restored. If this cannot be done locally, you should submit an official letter via your CO to the Chief of Naval Personnel (Attn: Pers-B2131) requesting that your duplicate service record be examined to determine your eligibility and have your SS designator restored.

However, as you know, if you have been disqualified from further submarine duty for any reason other than physical, you are not eligible for restoration of the SS designator.

Those who were physically disqualified and have since requalified are eligible to have their submarine designator restored and can be returned to submarine duty.

Detailed information concerning restoration of SS designators can be found in BuPers Inst. 1540.2C and Article C-7404, *BuPers Manual*.

the Fleet before he can again be considered qualified.

To make sure that proper qualification codes are assigned to individual officers, and to help detailing officers in making assignments:

- Complete information regarding duties performed in CIC must be included in the Annual Qualifications Questionnaire for Active Duty Officers (NavPers 310-W).

- The designation, "Air Controller," will be entered in block 32 of the Officer History Card (NavPers 765) of officers so designated.

- The entry, "Air Controller," will be made in the Roster of Officers (NavPers 353) opposite the names of those officers qualified or in training for this function.

Further details on this subject are contained in OpNav Inst. 1211.2B.

Procedures for Assignment to Military Academy Prep School

Procedures for assigning Navymen to the United States Military Academy Preparatory School Detachment have been modified in connection with the movement of the school to Fort Belvoir, Va.

The procedures apply to enlisted Navymen in the Regulars, or in the Reserves on active duty, who hold letters of appointment to West Point as principals, alternates or competitors. Under them appointees may, upon request to the Chief of Naval Personnel, be transferred to the Naval Receiving Station, Washington, D. C., for further assignment to the Preparatory School, providing they are found physically qualified. (Except for differences in the eye and vision requirements, physical standards are the same for both West Point and the Naval Academy.)

Full medical examinations are to be conducted at the local level and complete reports of these examinations are to be submitted directly to the Adjutant General, Department of the Army, Washington 25, D. C. (Attn: AGPBM). Candidates will not be transferred until final medical clearance has been received from the Army. If they wish, candidates not medically qualified may take the entrance exams at the station nearest to their place of assignment.

BuPers Notice 1301 (of 14 Oct 1957) is the new directive concerning the Preparatory School.

If Retirement Is Just Around the Corner, Read This

IF YOU ARE A REGULAR NAVY permanent officer, temporary officer, warrant officer with more than 20 years' active service, or enlisted man with 30 years' active service and are contemplating non-disability retirement, this recapitulation is for you. You can find additional information in BuPers Inst. 1811.1A.

As a general rule, a permanently commissioned officer or a warrant officer, either permanent or temporary, with more than 20 but less than 30 years' service may be retired upon his own request if he:

- Has twice failed of selection for promotion.
- Is within two years of mandatory retirement.
- Has limited usefulness because of being manifestly overage in grade, has poor health, or because continued service is not, because of conditions beyond his control, clearly consistent with the interests of national security.
- Faces personal hardship where retirement would definitely alleviate urgent personal problems involving serious permanent illness of a wife or child, or would actually prevent a positive reduction in the Navyman's financial status.

In addition, consideration will be given to requests by officers who do not fall into any of the above categories, and such requests may be approved under circumstances that are clearly not contrary to the best interests of the service.

All requests for retirement should be submitted at least three months in advance of the desired date of retirement and should read as follows: "Having completed . . . years' active service, it is requested that I be transferred to the retired list of the Navy, effective on the first day of" Enlisted men should submit application for retirement on NavPers 659, if available, if not available, an official letter similar in wording to the above will be sufficient.

Voluntary retirements are effective on the first day of a calendar month; however at the present time an effective date later than that requested may often be specified, in order to provide ample time for orderly relief, or in some cases,



"Quick, call the Captain! I think we're being attacked!!"

completion of current or ordered tour of duty.

Any officer who has been specially commended by the head of the Executive Department for performance of duty in actual combat for an act or service performed before 1 Jan 1947 will, upon retirement, be advanced on the retired list to the next higher grade than that in which serving at the time of retirement. This combat advancement, subject to approval by SecNav, is honorary and carries with it no increase in retired pay.

Following is a roundup of the retirement program for commissioned and warrant officers. It describes the requirements needed to retire under the particular category, the pay you will receive, and your rank on the retired list. Note that in computing pay and number of years creditable for basic pay purposes, it includes all service, whether active or inactive and includes the constructive service for pay purposes authorized for officers of the medical and dental corps. A fractional year of six months or more is considered a full year in computing the number of years by which the rate of 2½ per cent is multiplied.

• 40 Years' Service

Law: Title 10, U. S. Code, Section 6321.

Applicable to: Permanent Regular officers and warrant officers.

Creditable service for retirement: Active duty, commissioned, warrant and enlisted, in the armed forces or Reserve components thereof.

Pay: ¾ of the applicable basic pay of the rank in which retired.

Rank on the retired list: Rank in which serving at the time of retire-

ment, unless entitled to higher rank under the provisions of Title 10, U. S. Code, section 6151, as amended.

• 30 Years' Service (I)

Law: Title 10, U. S. Code, Section 6322.

Applicable to: Permanent Regular officers and warrant officers.

Creditable service for retirement: Active duty, commissioned, warrant and enlisted, in the armed forces or Reserve components thereof.

Pay: ¾ of the applicable basic pay of the rank in which retired.

Rank on the retired list: Rank in which serving at the time of retirement, unless entitled to higher rank under the provisions of Title 10, U. S. Code, section 6151, as amended.

• 30 Years' Service (II)

Law: Title 10, U. S. Code, Section 6326.

Applicable to: Enlisted personnel, and temporary officers and warrant officers with permanent enlisted status.

Creditable service for retirement: Active duty, commissioned, warrant and enlisted, in the armed forces or Reserve components thereof.

Pay: ¾ of the applicable basic pay of the rank, grade or rate in which retired.

Rank on the retired list: Rank, grade or rate in which serving at the time of retirement unless entitled to higher rank under the provisions of Title 10, U. S. Code, section 6151, as amended.

• 20 Years' Service (I)

Law: Title 10, U. S. Code, Section 6323, as amended.

Applicable to: Commissioned officers (including commissioned warrant officers) temporary or permanent.

Creditable service for retirement: Active duty, commissioned, warrant and enlisted, in the armed forces or Reserve components thereof, 10 years of which shall have been commissioned service.

Pay: 2½ per cent times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent.

Rank on the retired list: Rank in which serving at the time of retire-

ment, unless entitled to higher rank under the provisions of Title 10, U. S. Code, section 6151, as amended.

• 20 Years' Service (II)

Law: Title 10, U. S. Code, Section 1293.

Applicable to: Warrant officers, including commissioned warrant officers.

Creditable service for retirement: Active duty, commissioned, warrant and enlisted, in the armed forces or Reserve components thereof.

Pay: 2½ per cent times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent.

Rank on the retired list: Warrant grades held at the time of retirement, unless entitled to higher rank under the provisions of Title 10, U. S. Code, section 6151, as amended.

• Statutory Age

(Except Warrant Officers)

Law: Title 10, U. S. Code, Section 6390.

Applicable to: Permanent Regular officers.

Requirement: All permanent Regular officers below the rank of fleet admiral shall be retired on the first day of the month following the date of attaining age 62. (The President may defer the retirement of any such officer for so long as he considers advisable, subject to the following conditions: (1) the retirement of any

such officer may not be deferred beyond the date on which he becomes 64 years of age, and (2) not more than 10 officers whose retirement is so deferred may be on active duty at any one time).

Pay: 2½ times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent.

Rank on the retired list: Highest rank, permanent or temporary, held while on active duty.

• Statutory Age

(Women Officers, other than members of the Nurse Corps)

Law: Title 10, U. S. Code, Section 6399.

Applicable to: Permanent Regular women officers.

Requirement: Each woman officer who holds a permanent appointment in a grade below commander shall be retired on the first day of the month following the date on which she becomes 50 years of age. This does not apply to any officer in the rank of lieutenant commander who is on a promotion list for promotion to commander, nor does it apply to any officer while serving as assistant to the Chief of Naval Personnel with the rank of captain.

Pay: 2½ per cent times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent, minimum 50.

Exception: Women doctors, dentists, veterinarians, and women members of the Medical Service Corps appointed under the laws other than the Act of 12 Jun 1948 or section 5590 of Title 10, U. S. Code, are governed by the same retirement laws as are male commissioned officers of the Medical, Dental, and Medical Service Corps of the Regular Navy.

• Statutory Service

(Except Warrant Officers)

Law: Title 10, U. S. Code, Chapter 573.

Applicable to: Permanent Regular male officers.

Requirement:

(1) *Rear Admiral:* If not selected for continuation after 35 years' constructive service with five years in grade for unrestricted line officers and seven years in grade for restricted line and staff corps officers, shall be retired on the first day of July immediately following the fiscal year in which failed of such selection.

(2) *Captain:* After 31 years' constructive service with five years in grade, shall be retired on the first day of July immediately following the fiscal year in which such service is completed. If unrestricted line or staff corps officer, having twice failed of selection for flag rank, shall be retired on the first day of July immediately following the fiscal year in which 30 years' constructive service is completed. (A small number of unrestricted line and staff corps officers may be continued year by year until they have completed 35 years' constructive service.)

(3) *Commander:* (Except commanders designated for limited duty.) Having been twice failed of selection for captain, after 26 years' constructive service (or 30 years' constructive service if in the Medical Service Corps) shall be retired on the first day of July immediately following the fiscal year in which such service is completed.

(4) *Lieutenant Commander:* (Except lieutenant commanders designated for limited duty.) Having been twice failed of selection for commander, after 20 years' constructive service, shall be retired on the first day of July immediately following the fiscal year in which such service is completed.

(5) *Limited Duty Officers:* After

If You're Back from Sea Duty, Remember the Four C's

Continuing its program to reduce traffic accidents and the needless suffering and expense they cause, the Navy in November launched a special attack on the highway killer, geared particularly toward off-duty personnel. That effort — although aimed largely at cutting down the toll of accidents during the holidays — is still going on, for driving conditions are usually at their worst during the winter months.

The complete figures on 1957 traffic casualties were not available when we went to press, but those of the last few years indicate a trend toward longer and grimmer casualty lists. In 1956, some 7800 Navymen and Marines were admitted to medical facilities as a

result of injuries received in motor vehicle accidents, and about 1000 were lost permanently through death or disabling injuries.

These losses can only be brought under control by the continuous efforts of all hands. So, as part of the special winter-long safety drive, everyone in the Navy is urged to practice *common sense, caution, courtesy and consideration.*

To help emphasize the importance of traffic safety, BuPers Notice 5101 (of 8 Nov 1957), which inaugurated the stepped-up campaign, instructed all commanding officers to acquaint their personnel with the statistics on motor vehicle accidents involving Navymen and Marines this past year.

30 years' active naval service, exclusive of active duty for training, shall be retired on the first day of the second month following the month in which such service is completed. Lieutenant commanders shall be placed on the retired list on the 1st day of July immediately following the fiscal year in which they have twice failed of selection to commander. (If any officer subject to retirement under the latter provision had the permanent status of a warrant officer when first appointed as an officer designated for limited duty, he has the option, instead of being retired, of reverting to the grade and status he would hold if he had not been so appointed. If any such officer had a permanent grade below the grade of warrant officer, W-1, when first so appointed, he has the option, instead of being retired, of reverting to the grade and status he would hold if he had not been so appointed but had instead been appointed a warrant officer, W-1.)

Pay: $2\frac{1}{2}$ per cent times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. A fractional year of six months or more is considered a full year only in computing the number of years by which the $2\frac{1}{2}$ per cent is multiplied. Maximum 75 per cent. The retired pay of an officer commissioned in the Regular Navy pursuant to Act of 18 Apr 1946, or commissioned in the Regular Navy subsequent to 8 Sep 1939, while serving on active duty as a Naval Reserve Officer, who is so placed on the retired list, shall not be less than 50 per cent of his active duty pay at time of retirement.

Rank on retired list: Rank in which serving at the time of retirement, unless entitled to higher rank under the provisions of Title 10, U.S. Code, section 6151, as amended.

• **Statutory Service**
(Warrant Officers)

Law: Title 10, U.S. Code, Sections 1305 and 564.

Applicable to: Permanent warrant officers.

Requirement:

(1) **30 years' service:** Any permanent warrant officer who has not been selected for continuation, shall be retired on the first day of the month following the 60th day from the date of completion of 30 years' active

Navy Department Gets Its First (Official) Seal

For the first time in its history, the Department of the Navy has an officially sanctioned seal. An Executive Order, recently signed by the President, approved the design.

The central device of the seal remains about the same as those used for more than 100 years and reflects the denomination given in the Act of 30 Apr 1798, which officially established the Department of the Navy.

In the past, seals were patterned after the device used on naval commissions since about 1850. However, no formal adoption of a seal had ever been directed by any Executive Order. Working on a suitable design for such an official seal, the Publications Division, Administrative Office, Navy Department, designed a working model that was approved by the Secretary of the Navy. After this, the design went to the Department of the Army's Heraldic Division, Quartermaster Corps, which handles all projects such as these for the military services. The Heraldic Division prepared the final "working model" for the eventual approval of the President.



One of the important revisions on the seal changed the words "Navy Department," which actually refers to the headquarters in the nation's capital, to "Department of the Navy," which reflects all elements of naval activities.

The design of the new seal was described in the Executive Order in these heraldic terms:

"On a circular background of fair sky and moderate sea with land in sinister base, a three-masted square-rigged ship under way before a fair breeze with after topsail furled, commission pennant atop the foremast, National Ensign atop the main, and the commodore's flag atop the mizzen.

"In front of the ship a Luce-type anchor inclined slightly bendwise with the crown resting on the land and, in front of the shank and in back of the dexter fluke, an American bald eagle rising to sinister regarding to dexter, one foot on the ground, the other resting on the anchor near the shank; all in proper colors.

"The whole within a blue annulet bearing the inscription 'DEPARTMENT OF THE NAVY' at the top and 'UNITED STATES OF AMERICA' at the bottom, separated on each side by a mullet and within a rim in the form of a rope; inscription, rope, mullet, and edges of annulet all gold."

service. Any permanent warrant officer who is so recommended by a board of officers and in the discretion of the Secretary of the Navy may, upon completion of 30 years' active service, be continued on active duty with his own consent, but not beyond the date which is 60 days after the date on which he attains the age of 62.

(2) **More than 18, but less than 20 years' service:** Any permanent warrant officer who has twice failed of selection for promotion to the next higher permanent warrant officer grade, shall be retained on active duty and retired on the first day of the month following the 60th day from the date of completion of 20 years' active service, if he has not by

that time been selected for promotion to the next higher grade.

(3) **More than 20 years' service:** Any permanent warrant officer who has completed 20 years' active service on the date he has twice failed of selection, shall be retired on the first day of the month following the 60th day from the date of his second failure of selection.

(4) Retirement under (2) or (3) above may, in the discretion of the Secretary of the Navy, be deferred in the case of a permanent warrant officer serving on active duty as a commissioned officer and who elects to continue to so serve, until such date as the Secretary may prescribe.

Pay: $2\frac{1}{2}$ per cent times the number of years creditable for basic pay

purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent.

Rank on the retired list: Warrant officer grade in which serving at time of retirement, unless entitled to a higher rank or higher pay under other law, subject to the member's election.

• Statutory Age/Service (Navy Nurse Corps)

Law: Title 10, U.S. Code, Section 6396.

Applicable to: Officers of the Navy Nurse Corps.

Requirement: Each commander and lieutenant commander of the Nurse Corps who attains the age of 55 years and each lieutenant or officer of lower grade of such corps who attains the age of 50 years *may* be retired by the Secretary of the Navy on the first day of any month following that in which she attains such age or completes 20 years' active service, whichever is later. For the purpose of determining the eligibility of an officer for retirement under this section, her years of service are computed by adding all active service—(1) under an appointment or contract in the Nurse Corps of the Army or Navy, or Reserve components thereof; (2) as a commissioned officer in the Nurse Corps of the Army or Navy, or Reserve components thereof; or as a commissioned officer of the Air Force or Air Force Reserve designated as an Air Force Nurse; and (3) in the Nurse Corps or the Nurse Corps Reserve abolished by the Army-Navy Nurses Act of 1947.

Pay: 2½ per cent times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent.

Rank on the retired list: Highest rank, permanent or temporary, in which the officer served satisfactorily while he was on active duty.

• Statutory Age/Service (Women Officers)

Law: Title 10, U.S. Code, Sections 6398 and 6400.

Applicable to: Permanent Regular women officers (other than warrant officers and officers of the Navy Nurse Corps).

Requirement: Each woman officer who holds a permanent appointment in the grade of commander shall be retired on the first day of the month following that in which she becomes 55 years of age or has completed 30 years' active commissioned service, whichever is earlier. Each woman officer who holds a permanent appointment in the grade of lieutenant commander shall, if not on a promotion list, be retired on the first day of July following the fiscal year in which she completes 20 years' active commissioned service.

Pay: 2½ per cent times the number of years creditable for basic pay purposes times the applicable basic pay of the rank in which retired. Maximum 75 per cent, minimum 50 per cent.

Exception: Women doctors, dentists, veterinarians, and women members of the Medical Service Corps appointed under laws other than the Act of 12 Jun 1948 or Section 5590 of Title 10, U.S. Code, are governed by the same retirement laws as are male commissioned officers of the Medical, Dental, and Medical Service Corps of the Regular Navy.)

• Statutory Age/Service (Male Warrant Officers)

Law: Title 10, U.S. Code, Section 1263, and section 46(a) of the Act of 10 Aug 1956 (70A Stat. 638).

Applicable to: Permanent male warrant officers.

Requirement: (a) Any permanent male warrant officer who, having completed not less than 20 years of active service, has attained the age of 62, shall be retired on the first day of the month following the date that

is 60 days after the date on which he attains that age. (Example: age 62 attained 15 March, effective date of retirement 1 June.) (b) The separation of any person who, on 1 Nov 1954, is a male permanent warrant officer, and who upon attaining age 62 has completed less than 20 years' active service, may be deferred by the Secretary of the Navy until he has completed 20 years' active service, but not later than that date which is 60 days after the date on which he attains the age of 64.

Pay: 2½ per cent times the number of years creditable for basic pay purposes times the applicable basic pay for the grade in which retired. Maximum 75 per cent.

Rank on the retired list: Warrant officer grade in which serving at time of retirement, unless entitled to a higher rank or higher pay under other law, subject to the member's election.

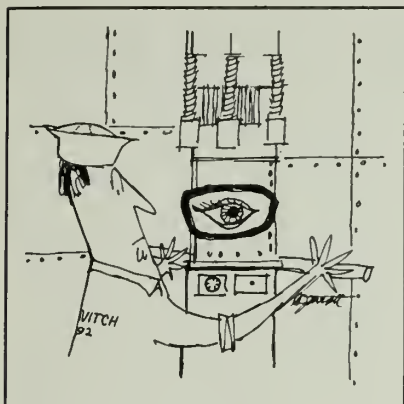
• Statutory Age/Service (Women Warrant Officers)

Law: Title 10, U.S. Code, Section 1255, and section 46(b) of the Act of 10 Aug 1956 (70A Stat. 638.)

Applicable to: Permanent women warrant officers.

Requirement: (a) Any permanent woman warrant officer who, having completed not less than 20 years of active service, has attained the age of 55, shall be retired on the first day of the month following the date that is 60 days after the date on which she attains that age. (Example: age 55 attained 15 March, effective date of retirement 1 June.) (b) The separation of any person who, on 1 Nov 1954, is a permanent woman warrant officer, and who upon attaining age 55 has completed less than 20 years' active service, may be deferred by the Secretary of the Navy until she completes 20 years' active service, but not later than that date which is 60 days after the date on which she attains the age of 60 years.





Latest List of Motion Pictures Scheduled for Distribution To Ships and Overseas Bases

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in November.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

The Quiet Gun (929) (WS): Western; Forrest Tucker, Mara Corday.

Badlands of Montana (930) (WS): Western; Rex Reason, Marjorie Dean.

Valerie (931): Drama; Sterling Hayden, Anita Ekberg.

Destination 60,000 (932): Science Fiction; Preston Foster, Pat Conway.

The Young Don't Cry (933): Drama; Sal Mineo, James Whitmore.

A Hatful of Rain (934) (WS): Drama; Eva Marie Saint, Don Murray.

God is My Partner (935) (WS): Adventure Drama; Walter Brennan, Jack Hoyt.

Spoilers of the Forest (936) (C) (WS): Adventure Drama; Rod Cameron, Vera Ralston.

Omar Khayyam (937) (C): Drama; Cornel Wilde, Michael Rennie.

The Night My Number Came Up (938): Drama; Michael Redgrave, Sheila Sim.

Lady Killers (939): Melodrama; Alec Guinness, Cecil Parker.

The Little Hut (940) (C): Drama; Ava Gardner, Stewart Granger.

Shoot Out at Medicine Bend (941): Western; Randolph Scott, James Craig.

No Time to Be Young (942): Drama; Peter Vaughn, Robert Smith.

Sweet Smell of Success (943): Drama; Burt Lancaster, Tony Curtis.

The Man of a Thousand Faces (944) (WS): Drama; James Cagney, Dorothy Malone.

Desk Set (945) (C) (WS): Comedy; Spencer Tracy, Katherine Hepburn.

Man in the Sky (946): Drama; Jack Hawkins, Elizabeth Sellars.

Run of the Arrow (947) (C): Drama; Rod Steiger, Sarita Montiel.

Jeanne Eagels (948): Drama; Kim Novak, Jeff Chandler.

Tip on a Dead Jockey (949) (WS): Drama; Robert Taylor, Dorothy Malone.

Interlude (950) (C) (WS): Drama; June Allyson, Rossano Brazzi.

P. T. Raiders (951): Drama; Richard Attenborough, George Baker.

To Paris with Love (952): Drama; Alec Guinness, Odile Versois.

Shortcut to Hell (953): Crime; Robert Ivers, George Ann Johnson.

Waiver for Yeomen But Not for Long

That sigh of relief that you hear rustling throughout the Fleet is coming from yeoman who got the word that the Navy Mail course requirement for the February examination has been waived.

This waiver was put into effect because there just aren't enough *Navy Mail* training manuals to take care of the number of applicants requesting them.

The courses that are waived for the February service-wide examinations are:

- *Navy Mail*, Volume 1, (NavPers 10221) for advancement to YN3 and YN2

- *Navy Mail*, Volume 2, (NavPers 10222) for advancement to YN1 and YNCA

These waivers, however, only apply to the February exam, since the *Navy Mail* training manual and course will be available April 1958.

Torpedo Retrievers

Out around the waters of San Diego, two boats, called torpedo retrievers, go to sea in fair and foul weather to keep Submarine Flotilla One up to par during submarine training exercises.

The 63-foot boats which can do close to 20 knots, operate with the Flotilla submarines during torpedo firing operations. Their main concern is to track down and retrieve torpedoes fired from the boats.

Hours before a scheduled training



exercise for a submarine, one of the small retrievers heads out to sea. Once in the area where the torpedoes will be fired, the crew makes ready for one of two methods of operation.

During one method the retriever waits in the approximate area that the torpedo is expected to surface. Once sighted it is chased down until it expends itself, then hauled aboard.

The other method employed in picking up the "fish" is put into operation with the retriever underway approximately 1000 yards behind the designated target. Once the torpedo's wake is spotted the retriever tracks it down and picks it up.

Both electrical and manual winches are used in hoisting the torpedo aboard. Sets of rollers, attached to the sloping deck in the cutaway stern of the boat, speed up the operation. As the winch pulls, the torpedo glides across the rollers and up the stern ramp until it is placed completely in the boat. Each retriever has a capacity to carry four 3000-pound torpedoes.

When the operation is completed and the crew has accounted for all the torpedoes fired by the submarine, it then begins its trek back to San Diego harbor. Arriving at the tender, the torpedoes are unloaded and stored aboard the ship.

Each of the retrievers carries a six-man crew of two engineers, two seamen, a cook and a senior petty officer, who is the skipper.

Moroccan Bound? Here Is What to Expect at Port Lyautey

NO MATTER WHERE you pull duty, whether it be continental U. S., Japan, Adak, or Naples, there's always the problem of just plain living, and of paying the rent, the butcher and baker, and of buying the children's shoes.

The purpose of describing living conditions throughout various parts of the world in these pages from time to time is to make available the accumulated experience of those who have preceded you. Not all the information you find here is necessarily relevant to your situation, but there's nothing in the book that says you have to take any advice offered you. You may never, for example, be stationed in Port Lyautey, but here's the most recent information on that location. (A more complete report with changes, will be ready in the near future. When available, the additional data will be reported in ALL HANDS.)

Housing—Most married people find off-base housing in two general areas: Port Lyautey, where most of those living ashore are located, and Medhia Beach, five miles away on the Atlantic Coast. Quarters are limited on the base.

Construction is of the plastered concrete block type, except at Medhia Beach, where some houses are built of wood. Eighty per cent of the housing is apartment type, the remainder are villas. Seventy-five per cent of the apartments have one bedroom, 20 per cent have two, five per cent have three bedrooms. Eighty per cent of the villas have two bedrooms, the others, three.

Since no housing is heated, portable kerosene heaters must be used during the winter months, Africa or not. Electric heaters are too expensive for most budgets. In the older apartments and houses, hot water is only to be found in the bathroom, not in the kitchen. Closets are rare. All housing is damp during the winter rainy season and liable to mildew. No apartment buildings are over four floors high.

If you want housing within a reasonable time, you would be wise to settle for one bedroom less than you are normally accustomed to.

Average rent per month is: one bedroom, \$45 to \$75; two bedrooms,



\$65 to \$120; three bedrooms, \$85 to \$150. Utilities are extra.

Furnishings and Appliances—Almost all of the housing is unfurnished, with neither stove nor refrigerator. The remainder is only partially furnished by U. S. standards; beds, bureaus, divans, tables and basic kitchen utensils are included. Refrigerators and ranges should either be brought from the States or bought from other Americans about to leave the area. Since the cost of electricity is high, most people prefer to buy a small gas range of the two- or three-burner variety. Gas may be bought for \$4.75 for about a month's supply. All off-station electricity is 50 cycle instead of the 60 cycle current common in the States. This means that phonographs and other motor driven appliances must be fitted with adapters.

As soon as you arrive, make application for housing at the Off Station Housing Board. You will be placed on a waiting list, with precedence dating from the date of application. No other priorities are involved except that individuals being transferred from other duty stations outside the continental U. S. with concurrent dependent travel orders will get immediate priority. Authorization for dependent travel is made when a housing contract is signed. It usually takes about six weeks for dependents to transfer from continental U. S. to Morocco. Because of the comparative shortage of housing, these waiting periods may be expected: one bedroom, no waiting; two bedrooms, one to four months; three bedrooms, three to six months. Concurrent travel is authorized for

families with not more than two children for hotel accommodations or one-bedroom apartments.

Household effects will not be shipped until a housing contract has been made. It usually takes one and one-half months for household effects to arrive and there are no facilities to store them at Port Lyautey.

Off Station Pay (not including BAQ)—Enlisted: \$1.90 subsistence per day; \$1.00 commuted rations per day; \$.55 quarters allowance per day. Officers: \$2.60 subsistence per day; \$.75 quarters allowance per day.

On Station Housing—At the present time there are 37 billet housing units and 32 rotational housing units on the base for enlisted families and 41 billet and 19 rotational housing units for officers. Rotational housing is allotted according to a priority waiting list. Eighty-eight new sets of quarters should be completed at this time.

Billet housing for the most part consists of recently constructed units located on the edge of the base. They are of concrete, and built as two-, three-, and four house units. They have: three bedrooms, front and back yards, thermostatically controlled central heating, fully furnished including refrigerator, gas range, beds, mattresses, pillows, rugs and Venetian blinds. Bring your own linens and household appliances such as electric toasters. All base electricity is 60 cycles, the same as standard U. S. current.

Rotational housing, for married enlisted men, consists of half quonsets. These include two bedrooms, a kitchen alcove and a combination living-dining room. Space heaters are provided which can be removed during warm weather months. These units have proven satisfactory—so far. The convenience of base facilities is considered one of the biggest advantages in occupying this type housing.

You may make application for rotational housing upon arrival. However, because of the constant backlog of applicants, you may have to wait from 12 to 18 months.

When an enlisted man or officer moves aboard from off station hous-

ing, he loses his quarters allowance and his BAQ.

Hotel contracts may be made, thus authorizing the concurrent travel of dependents if you have only two children (any age) and are at least an E-4 with four years' service. The minimum cost per month can be estimated at \$90.

Military Personnel Billeting—Officers' quarters include the Senior and Junior BOQs. Since the latter is of recent construction and includes excellent facilities, all single officers live there. Facilities include barber shop, laundry and dry cleaning office, reading lounge and sun decks. The Senior BOQ houses the Officers' Club and Wardroom and is used for visiting personnel.

A transient hotel, of recent construction, is used for billeting transient military personnel and their dependents and civilians.

Enlisted barracks are all of permanent masonry cubicle type.

Navy Exchange Shopping Center—The main retail store carries all items used in day-to-day living as well as many items peculiar to this area and that are needed here. The Ladies' Shop carries a complete assortment of sizes and a large selection of styles in dresses, lightweight coats, jackets, shoes, skirts, sweaters, blouses, and other external wear. The Officers' Uniform Shop carries uniforms and all items of regular stock; special orders are taken upon request. Alterations are returned in five days. Laundry and Dry Cleaning is done at the Navy Exchange plant located on the Base.

The super market is comparable to a good sized Stateside type. Canned goods (including baby food) of all varieties are on hand at all times. Some fresh vegetables are available and milk, eggs, butter and meat are carried. A complete stock of fresh frozen foods from the U. S. is available.

A Beauty Salon is in operation five and one-half days a week. Air conditioned, it is located in the main shopping area. Other Navy Exchange activities include: gas station, native goods shop, barber shops, cafeteria, and terminal snack bar.

Money Matters—Military scrip is the official currency of the Base. Moroccan francs are the only authorized currency ashore in Morocco.

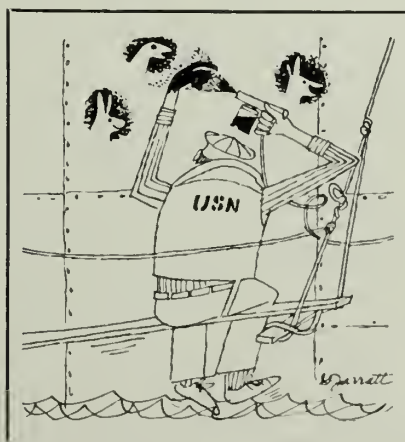
U. S. currency may be exchanged for scrip or francs aboard the Base at the banking facility. Scrip can be exchanged for francs in town at Shore Patrol Headquarters. The rate of exchange is 349.5 francs to the dollar.

The banking facility, which is located in the Shopping Center, renders the following services: conversion of scrip, "green" or checks to Moroccan francs; cashing and selling of traveler's checks, cashier's checks, money orders and personal checks; personal checking and savings accounts in scrip and francs; handles automobile insurance; certain personal loans; telegram service; mail and cable transfer of funds; hotel, air, and steamship reservations; sale of railroad tickets for independent and package tours.

Medical Facilities—A 53-bed station hospital was opened at the beginning of 1955 with facilities for dependent inpatient care and outpatient care within the capabilities of the personnel assigned. Obstetrical inpatient care is available.

Dental care is available to all military personnel by appointment. For dependents, however, only emergency dental care is available. Adequate civilian dental treatment is available in Port Lyautey.

School Facilities—A dependents' school is located aboard the base. It provides six years of elementary school and six years of secondary school. The high school is accredited by the North Central Association of Colleges and Secondary Schools. School buses are operated on a regular schedule to and from the school from points in Port Lyautey, Sidi Yahia and Medhia Beach.



The fee for kindergarten is \$10 per child per month or \$15 for two children per month. It is operated on one-half day classes. Transportation to and from school is provided by the parents.

Religion—There are religious services for Protestant, Catholic and Jewish faiths.

Recreation—The recreation center is located in Building 29. The Special Services Officer is in charge of recreational facilities and programs aboard the Base. Four bowling alleys are available.

Athletic facilities include: a golf course consisting of nine holes and club house. A driving range is located behind the swimming pool; a gymnasium in which all types of sports equipment are available for checkout; handball courts are located adjacent to the gym; four tennis courts are available. Night softball is played at Hoque Field. Leagues are composed from commands in the area; there is also a baseball Little League composed of four teams. Football leagues are made up from commands in the area.

A 50-meter swimming pool was completed in September 1955. A bath house, shower facilities and lawn furniture are available. Located across from the Recreation Center, is an open air roller skating area. Overhead lighting is provided for night skating. Roller skates are available through Special Services.

Beaches are available for wading. (The currents in the area are considered too dangerous for swimming.) The Enlisted and Officers' beaches are located at Medhia Beach. Shotguns are available for skeet range and hunting. Fishing tackle is available for checkout. Special Services has under contract a 60-foot converted sub-chaser which is used for deep sea fishing parties on weekends. A riding stable is available, with rental horses and equipment (both Western and English style saddles).

Movies are shown nightly at several locations aboard the base. WNAA, a local branch of AFRTS, broadcasts daily from 0630 to 2400 and around the clock Fridays and Saturdays. A radio ham shack is located in a quonset hut in the MCB housing area and operated by the station Ham Club.

The hobby shop furnishes tools

and material for woodworking, carpentry, leatherworking, photography, painting and modelcrafting. Also available are items for sale in conjunction with most hobby crafts. Adjacent to the Hobby Shop is the Hobby Shop Garage. Minor tune-up equipment is available, as are hand tools and a grease pit.

Tours are conducted by the Chaplain's office and Special Services to places of interest in Morocco. Periodic week-end flights are also arranged to Italy and Spain.

Dancing, bingo and movies are featured at the Officers' and Chiefs' Clubs. Meals are served and soft and hard drinks are available. Bottled liquors are sold at Officers' and Chiefs' Wine Messes.

The modern Enlisted Men's Club, overlooking the swimming pool, offers dancing nightly, bingo, soft and hard drinks and cafeteria-style meals. The Officers', Chiefs' and Enlisted Men's Clubs maintain beach clubs at Medhia Beach.

Bus Service—Navy-operated buses run throughout the day via four different routes on the station. Commercial French buses travel between the station and Port Lyautey every 40 minutes. Navy buses run between the station and Medhia Beach at intervals throughout the day.

Mail—Although it is difficult to generalize about mail service from the States to Port Lyautey because of the frequent change in flight schedules, a fair estimate of the time involved is about one week. Parcel Post is sent from New York by ship approximately every 10 days. Transit takes about 10 days.

Transportation to Morocco—Air flights originate from Charleston Air Force Base, Charleston, S. C., according to schedules promulgated by MATS. The trip across normally takes one day. Accommodations are not the best during stopovers, but infants and children are adequately cared for. Sufficient warm clothing is required for high altitude flying, and it is suggested that women passengers wear slacks for the trip. Baggage allowance is 100 pounds for dependent women and 65 pounds for children.

Ships—MSTS runs regularly scheduled transports from New York to Casablanca. The trip across takes from 7-10 days.

Passengers 12 years old and above

are allowed 350 pounds hold baggage, while children under 12 are allowed 175 pounds. Hold baggage is normally considered to be trunks, footlockers, baby carriages, cribs or play-pens. Because of space limitations, the amount of hand baggage which may be kept in staterooms is two bags per person 12 years and above, and one bag for children.

Adults and children six years old and above traveling on a space requirement basis will pay about \$1.75 per day for meals. Infants and children under six years of age will be charged about one-half the adult rate. On those ships having regular laundries, there will be an occasional nominal charge for any laundry done.

Automobiles—Arrangements for shipment should be made through the Navy Supply Depot, Bayonne, N. J. Your automobile is shipped to Casablanca and is picked up by you upon receiving notification of its arrival. It generally takes six to eight weeks for an automobile to arrive. Be sure to comply in advance with instructions issued by NSD Bayonne for preparing your car for delivery.

Overseas shipment of automobiles by enlisted personnel of pay grades E-4 with less than seven years' service, E-3 and E-2, and E-1, must be specifically authorized. Vehicles more than seven years old may not be imported by U. S. Naval personnel into Morocco.

Military personnel and American civilians employed by the U. S. armed forces are allowed, under existing custom regulations, to have during their tour of duty in Morocco, one vehicle per family for which they need pay no customs duty.

Personal liability insurance is required and is available through American and French companies for about \$75 to \$100 a year. Property damage and collision insurance can also be obtained locally. Check on your insurance to make sure it is valid here.

If you are paying for your car on time payments, it is necessary to determine whether your loan agency will object to your bringing your car to this area. If so, refinancing can be made with one of several other agencies.

The necessary documents required by local law for the operation of vehicles in Morocco along with

license plates, name plate and headlight reflector requirements can be found in ComNavActs Instruction 11240.1. Navy Driving Permits must be obtained from the NAS Transportation Department before driving in this area. This applies to dependents as well, who will be issued the same type of permit stamped "Dependent."

Greasing and oil change facilities as well as all engine work and body repairs are available in Port Lyautey. Spare parts and accessories that are not obtainable at the Navy Exchange

Navy JAG Passes

If you're like most of us, there comes a time in your life in which you find it necessary or desirable to buy an article on the installment plan. Nine times out of ten—or oftener—events proceed according to schedule. You make your down payment, then each month you further reduce your indebtedness until you receive that lovely little hunk of paper which says: "Paid In Full."



It's the tenth time that hurts. In the *JAG Journal* of October 1957, a Navy legal officer, LCDR Nathan Cole, Jr., USN, presents an excellent discussion of installment purchases and also describes the undesirable features of the conditional sales contract. He reminds his readers that it has been found that quite frequently personnel who default on these contracts not only lose the item purchased and the money they have already paid, but are also sued by their creditor for an additional amount.

This, in effect, is what he has to say:

Installment buying probably creates more misunderstanding and hardship than any single form of business dealing. This is generally caused by lack of serious considera-

gas station are usually available at either the AFEX automobile shop at the Air Force in Rabat or at Sidi Slimane Air Base. (There is also the Hobby Shop Garage available.)

The roads are surprisingly good, and your car can be used to good advantage in taking sightseeing tours in this area.

The one Rule-of-the-Road to remember above all other things in Morocco is that in practically all cases, a vehicle approaching from the right (including a bicycle) has

the right of way unless traffic signs indicate otherwise.

Clothing—Blues and Aviation Greens are worn during the winter season from 1 October to 30 April, also, working and dress Khaki when authorized. Khakis and whites are worn from 1 May to 30 September by CPOs and enlisted men. Officers and CPOs are required to have whites for inspections and formal wear. Undress khaki or tropical uniform (with long trousers) is authorized as the working uniform during the summer season. Raincoats are

needed for about four months during the year.

Most military personnel wear civilian clothing on liberty. Bring the type suitable for the climate of Southern California: sports shirts, jackets, slacks and sport shoes. Sufficient heavy clothing is necessary for cold, damp winter weather.

Women should bring dresses appropriate for all seasons—suits and skirts for winter months, cottons and silks for summer months. A couple of dresses that can be used for cocktail as well as afternoon dresses are

You the Word on the Ups and Downs of Installment Buying

tion beforehand, over-selling on the part of some concerns and individuals, and lack of understanding of the legal consequences.

The most common form of installment purchase is the conditional sale where, for a small down payment, possession of the property is given to you but the title is reserved by the seller. You must then make payments, usually monthly, and when the full purchase price, plus interest and charges is paid, title is transferred to you.

This procedure enables you to acquire property which you could not get if you were required to pay cash—but frequently you pay dearly for this privilege.

Basically, what happens in such an arrangement is this: You borrow the balance of the purchase price from the seller or from a finance company and repay the money plus interest over a set period of time.



For the privilege of getting possession of the property, to reimburse the lender for the losses occasioned by financing and to protect the lender's interest, you also pay "finance charges."

Interest is regulated by law, but finance charges in most instances are not. You may therefore find

yourself paying 20 to 30 per cent more over a period of time than the actual cost of the article purchased. This is not always the case, but it is something to keep in mind.

The plot thickens if you fail to make your payments on time. Most conditional sales contracts provide that upon default the seller or lender may repossess the property without going through court, may sell the property again and, if the proceeds of the second sale do not



satisfy the balance due, may sue the purchaser for the difference.

You may then find that you have lost the money you have paid, plus the property, and that you have a judgment against you for still more money. Sounds tough, but it happens.

Such contracts have their uses but they should never be entered into unnecessarily or without full understanding of the consequences. A few simple precautions will save you a lot of headaches:

- Never buy anything on time that you do not need. Save your money and pay cash.

- When you are getting ready to buy, shop around. Don't allow yourself to be bullied, dazzled or fast-talked by a salesman into buy-

ing something you find out later you really don't want. Generally speaking, we are now living in a buyer's market. *If you don't buy today, you can usually get the same thing or something better tomorrow or the next day.* Don't accept at face value everything the salesman tells you. Remember, he's trying to make a sale.

- If you *must* finance, try a bank or some private arrangement if possible. You'll get a much better deal. Again, shop around. You don't have to deal with the finance company recommended by the dealer.

- NEVER, no never, sign a contract in blank, regardless of what the seller tells you and never sign one that you have not read and completely understood. Never mind how impatient the salesman appears. If you have any doubts, see your legal officer *before* you sign. Later, you'll only get sympathy.



- Don't figure your pay check down to the last penny in order to buy an article. If an emergency arises you may be unable to make your installment payments and lose both your money and the property.

"Easy payments" are sometimes easy only on the seller. They may not be so easy on your budget.

a great help. Sportswear is essential.

It is suggested that women bring formals or an evening skirt for the occasional formal dances.

Bring raincoats, rubbers and hats, as well as necessary winter and summer clothing for children. A good supply of children's shoes is a must. Climatic changes from quite cool mornings to warm days and suddenly cool evenings best describe the winter months. Hence, an ample supply of warm clothing is necessary. Generally, blue jeans are the most practical for children and it is advisable to bring several pairs. A plentiful supply of socks is another 'must.'

Appliances—If you expect to live in off-station housing, it is advisable to bring your refrigerator and gas range, provided the refrigerator operates on 110 volt, 50 cycle current and the gas range can be adapted to the use of bottled gas.

The Navy Exchange stocks refrigerators suitable for 50 cycle current and small butane gas ranges at very reasonable prices.

For off-station living, automatic washers are not recommended, inasmuch as quite a few houses do not have hot water and in many cases the electricity is 50 cycle current only. Suggest bringing wringer type only.

The retail Store stocks irons, toasters and other everyday appliances. Personnel living on the station have much more use for electrical appliances in view of the standard U. S. current and the absence of high electricity costs. However, as a rule, all appliances that do not depend for their operation on motors perform satisfactorily on 50 cycle current. As a suggestion, off-station personnel may find a Coleman lamp useful.

Regulations Announced on Heavier-Than-Air and Lighter-Than-Air Rotation

Reserve officers accepted for the Heavier-Than-Air / Lighter-Than-Air Integration Program must now agree to remain on active duty for three-and-a-half, instead of two years after they complete their LTA flight training.

Except for that change, which was announced as part of BuPers Inst. 1540.27B, the HTA/LTA program remains about the same. Since 1949 all pilots entering the LTA organization have come from HTA sources. The new instruction continues that practice.

As dictated by the needs of the service, HTA/LTA qualified pilots will be rotated between HTA and LTA duties in order to maintain their qualifications in both types of flying. LTA pilots who are not qualified in HTA will be governed by these requirements:

- Captains and commanders of the Regular Navy, who declined HTA flight training while serving in grade, may continue to rotate between LTA and unrestricted line (Code 1100) duties. When requesting return to LTA billets they will be considered on the same basis as their dually qualified contemporaries.

- Lieutenant commanders and below, unrestricted and restricted, Codes 13X0 and 15X0, who failed or declined HTA training while serv-



MEMORIAL CHAIR FOR STADIUM—Pictured here is a sample of a memorial chair which can be dedicated and suitably inscribed for any person who has ever served in the Navy or Marine Corps. This type memorial chair may be had for a \$100 donation to the Memorial Stadium Fund. Inscription on the back of the chair will give name, rank or rating and the dates which are desired.

ing in grade, will not be assigned to duty involving flying as a pilot.

- Reserve and temporary officers qualified as pilots in LTA only will be rotated within the LTA organization as required by the needs of the service.

Training classes for LTA pilots are convened about four times a year at the Air Ship Training Group, U. S. Naval Air Station, Glynnco, Ga. Each class will consist of Regular and Reserve officers, including flight students who have just completed HTA flight training.

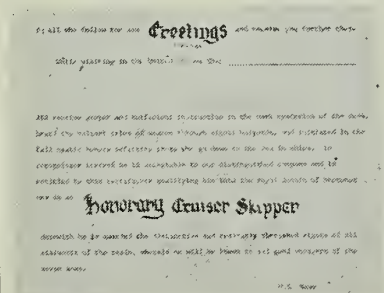
Code 1310 officers must complete a tour of duty in an HTA squadron before they will be ordered to LTA training. For first-tour naval aviators (Code 1310) this means the completion of two years in an HTA squadron before application may be made for LTA flight training.

It is preferred that officers entering LTA training be volunteers. However, naval aviators of the required rank and qualifications will be ordered to this training if that step is necessary to fill class quotas.

Only naval aviators in the grade of lieutenant and below are desired as applicants for LTA training. Applications for HTA training are no longer sought from aviators (Airship).

Honorary Cruiser Skippers Win Navy Certificates

Not everyone receives proper and sufficient instruction in the dark mysteries of the seas. Nor do they hear the valiant cries of seamen through signal halyards. But



to those who have—move over. Close to 100 more have joined you.

Newest to receive the proper instruction were Norfolk, Va., newsboys who were presented 8 x 10 certificates qualifying them into the Royal Domain of Neptune Rex as Honorary Cruiser Skippers of the Atlantic Fleet Cruiser Force.

While aboard *uss Newport News* (CA 148), they were serenaded by the band of Com-CruDiv Two, a tour of the ship and dinner with the crew.

Some Pointers on Exams and Courses for Officer Promotion

IF YOUR NAME APPEARS on an Alnav stating you have been recommended for promotion to any rank from lieutenant through captain you'll have good reason for celebration—BUT you will first have to prove to the Navy that you are qualified.

As you no doubt know, to be promoted above the grade of lieutenant (junior grade) on the lineal list you must be:

- Selected by a selection board.
- Found professionally qualified by a board of officers, pending completion of the requirements set forth in BuPers Inst. 1416.1C.
- Found physically qualified.

In addition to the three points mentioned above, you must, if USN, be nominated by the President and confirmed by the Senate for appointment to a higher grade. If you are a permanent USN unrestricted line officer, or a limited duty line officer in the grade of lieutenant or above, you must, if male, have performed at least two years' sea or foreign service after your name was placed on the promotion list for your present grade.

Your promotion finally comes about when a vacancy exists in the grade for which you have been selected. As you can see, it is not always wise to start spending your increase in pay as soon as you find your name on the selection board list.

To establish the professional qualifications of an officer on active duty (except captain) eligible for promotion to grades above lieutenant (junior grade), you must either take a written professional examination or establish entitlement to exemption. This discussion is primarily con-

cerned with the means by which you may be found professionally qualified.

New procedures have been set up so that officers selected for promotion may certify their entitlement to full exemption from written professional examinations. To find out if you are (and how you become) exempt, you should verify the areas and technical specialties of examinations contained in BuPers Inst. 1416.1C. This instruction is not applicable to officers of the Medical, Dental, Medical Service, and Nurse Corps, who will continue to be examined according to procedures established by the Chief of the Bureau of Medicine and Surgery.

It isn't too difficult to find out what courses and schools will exempt you from taking the written examination. Just check the Summary of Professional Requirements listed in enclosures (1), (2) and (3) to BuPers Inst. 1416.1C. Refer to the Summary that is appropriate to your status—USN, USNR, or USN(T)—and fiscal year of selection. Enter the Summary with your rank and designator and note the code numbers of examinations required. Refer to enclosure (4) of the same instruction to see what subjects you are being examined in, what texts the examinations will be taken from, what courses and which schools will exempt you from taking the written professional examinations.

As an example, suppose you are an 1100 LTJG whose name appears on an Alnav stating that you have been recommended for promotion to lieutenant. Enclosure (1) to the instruction states that you will be examined in subjects E-2, E-8 and E-10 in the Executive Area. Enclosure (4) to the same instruction notes that E-2

means that this particular part of the examination will be on the subject of Navy Regulations. Moving over to the next column (under examination bibliography) it says that your examination will be taken from *U. S. Navy Regulations, 1948*; *Navy Department General Orders, Series of 1948*; and *Security Manual for Classified Matter, OpNav Inst. 5510.1A*. You're thoroughly familiar with all these publications, of course, so you have nothing to worry about.

Nevertheless, the next column is the one you've been looking for. This gives you the correspondence course exemptions. If you took both the correspondence courses listed, *Navy Regulations (NavPers 10740-A)* and *Security of Classified Matter (NavPers 10975)*, you are then exempt from the E-2 examination.

The next column (school exemptions) points out that you would also be exempt from the E-2 examination by satisfactorily completing the resident courses of any one of the schools included in List I (also contained in the instruction).

Completion of NROS course 185 contributes toward exemption to the same extent as the correspondence course in *Security of Classified Matter*.

The same procedure is repeated when locating exemptions in the E-8 and E-10 subjects in the *Executive Area* as well as those required in the *Operations and Technical Areas*.

As in most cases, there are exceptions. For instance, some exemptions are listed for Naval Reserve Officers' School (NROS) courses completed by Reserve officers while on inactive duty. Enrollment in these courses is not open to officers on active duty, nor will auditing an NROS course



"Let's get off on the right foot this year with ALL HANDS... Remember to pass this copy on to the next Navyman."

while on active duty provide exemption.

Examination questions, while based for the most part on the tabulated bibliography, may contain some questions covering important equipment and techniques which are too new to be covered by the bibliography. Material concerning questions along this line has been widely disseminated and the equipment placed into operational use.

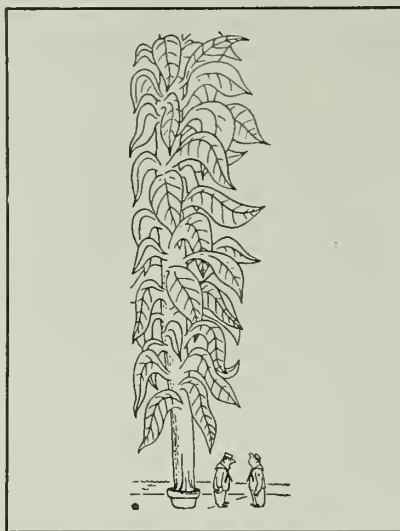
In some cases, formal papers are required for certain officers to cover specified subject areas where no school exemption has been earned. In these instances, there is no provision for examinations and papers are mandatory. (See enclosure (5) to the instruction.)

These papers, written in a quality and style suitable for publication in a professional or general circulation periodical, should indicate adequate research and sound interpretation. They may be submitted at any time, but the earlier the better. In any case, they must be submitted no later than a month before examinations are scheduled.

These papers should be forwarded to the Chief of Naval Personnel via your commanding officer and the cognizant bureau or officer. The bureau or office will review the paper and make appropriate recommendation as to acceptability to the Chief of Naval Personnel, by endorsement on the forwarding letter. Upon acceptance of the paper, the Chief of Naval Personnel will notify the officer concerned. This notice of acceptance will constitute satisfactory evidence of qualification in the subject concerned.

If you are selected for promotion and are *fully* exempt from taking the written professional examination, or if you become fully exempt at any time before the date of the examination, this fact may be certified by following the sample form to be found in BuPers Inst. 1416.2B, Enclosure (3), and sending it off to the Chief of Naval Personnel with your commanding officer's endorsement.

Your commanding officer will review the evidence of entitlement to exemption on its merits. Any of these documents will be accepted: diploma, certificate, or letter of satisfactory completion of appropriate resident



"I grew it from a seed."

or correspondence course, bearing signature of competent authority; certification of satisfactory completion of an appropriate correspondence course, stamped on the last assignment of the course, and bearing the signature of appropriate authority. Facsimile signatures used on proffered evidence of exemption are acceptable, with or without authenticating initials. Partial completion of a correspondence course will not constitute exemption from any portion of the written professional examination.

You are also entitled to full exemption from the written professional examination for a grade in which you have served before on active duty. By submitting a letter or statement of entitlement to *full* exemption from written professional examination at any time before the date of the examination, you will not be required to appear before a local examining board.

When you complete taking the examinations they will be returned to the Naval Examining Center for grading. Once graded the results will be forwarded to the Chief of Naval Personnel (Pers-B8).

If you are not fully exempt, your examination will be requested from the Naval Examining Center, Great Lakes, Ill., about 60 days after the Alnav appears. The examination will be forwarded to your commanding officer. Within 30 days after the exam is aboard, you will be ordered to appear before a local examining

board. But your commanding officer can delay this time up to 60 days when operating schedules or other circumstances warrant.

In no case, however, will examinations be delayed for the sole purpose of allowing you to establish entitlement to full exemption. Nor will the Bureau authorize a delay in taking the written professional examination in order to allow you to complete correspondence courses for examination exemption.

When you complete the examinations, they will be returned to the Naval Examining Center for grading. When graded, the results will be forwarded to the Chief of Naval Personnel (Pers-B8).

The physical examination applies to all officers and is independent of the professional examination. Report of the physical exam, with the medical examiners' opinion, is made on Standard Form 88 with the original and one copy forwarded to the Bureau of Medicine and Surgery. Final determination of your physical fitness for promotion is made in the Navy Department.

If you have any doubt concerning any phase of the examination for promotion, you may address your question to the Chief of Naval Personnel (Attn: Pers-B8).

More detailed information may be found in BuPers Inst. 1416.2B.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 50—Announced approval by the President of reports of selection boards which recommended male officers of the Regular Marine Corps and

Marine Corps Reserve for temporary promotion and women officers of the Regular Marine Corps for permanent promotion.

No. 51—Gave notice of convening of selection boards to recommend staff corps officers on active duty (except TARs) for temporary promotion to lieutenant commander and lieutenant.

No. 52—Stated that MCM 1951, trial guides and similar material which specifically references MCM 1951 or instructions containing naval policy declarations are not to be used by members of a general or special court-martial (except the president) during trial or deliberations.

No. 53—Concerned distribution of influenza vaccine.

BuPers Instructions

No. 1300.19A—Concerns delegation of control over enlisted personnel distribution and policies to be followed in distribution and assignment of enlisted personnel.

No. 1300.26—Implements those parts of DOD instructions pertaining to transportation and logistic support of dependents in overseas areas.

No. 1301.23A—Explains procedures to be used in effecting transfers of USN and USNR commissioned and warrant officers on active duty to armed services hospitals and medical facilities for treatment.

No. 1306.46A—Sets forth policy for the administration of enlisted personnel in special weapons activities under detailing control of the Chief of Naval Personnel.

No. 1306.66—Lists qualifications and procedures for requesting transfer to duty as technical adviser at Navy Training Publications Centers, Memphis, Tenn., or Washington, D. C.

No. 1710.1E—Establishes basic policies and procedures for the conduct of All-Navy and Inter-Service sports championships.

No. 1920.8A—Outlines procedure for appointment of regular commissioned or warrant officers to Reserve commissioned or warrant officer grades upon resignation from the Regular Navy.

SecNavy Instructions

No. 1210.4—Sets forth regulations governing the designation of Reserve officers for engineering, aeronautical engineering and special duty.

No. 4001.2—Outlines procedures for acceptance of gifts, devices or be-

quests to the Navy for the benefit of institutions or organizations under the Navy Department's jurisdiction.

No. 4050.3—Authorizes submission of applications for shipment of household goods to the most conveniently located activity of the Naval Establishment.

Notices

No. 1412 (22 October)—Announced Naval Reserve promotion zones and tentative convening dates for selection boards meeting in fiscal year 1958 to consider eligible Reserve officers for promotion.

No. 1650 (24 October)—Added two units to list of those eligible for State of Viet-Nam Presidential Unit Citation.

No. 1120 (29 October)—Announced names of personnel recommended for appointment to the permanent grade of ensign, Medical Service Corps, by the 1957 Naval Examining Board.

No. 5101 (8 November)—Presented a compilation of motor vehicle accident statistics for 1956.

No. 1650 (12 November)—Concerned entries to be made in service records of officer and enlisted personnel involved in winning of CNO Aviation Safety Awards for fiscal years 1956 and 1957.

No. 1742 (12 November)—Announced requirements and 31 Jan 1958 deadline for payment of poll tax by those desiring to vote in 1958 Texas elections.

No. 1611 (13 November)—Directed attention to revised instructions governing preparation and submission of fitness reports.

No. 1000 (18 November)—Set forth Change No. 2 to BuPers Inst. 1000.7A, which described programs and opportunities available to naval personnel.

No. 1430 (20 November)—Described advancement opportunities for enlisted personnel.

No. 1418 (21 November)—Announced that Navy mail course required to establish eligibility to advancement in Yeoman rating group is waived for February 1958 exams.

No. 1210 (23 November)—Concerned program for transfer of certain Reserve officers on active duty from unrestricted to restricted line.

No. 5802 (26 November)—Called attention of aliens to requirement that they must report their addresses during the month of January.

Thousands of Navymen have done duty aboard a ship that never has gone to sea. The chances of its ever doing so are very, very remote. This, of course, would refer to none other than USS Recruit (TDE-1) based at the San Diego Naval Training Center—some 200 yards away from the nearest water.

The idea for a ship within the Training Center was conceived by the Chief Petty Officers who were entrusted with the mission of indoctrinating young recruits in the seagoing aspects of naval life. Construction started in the Spring of 1949 with the work being done entirely by enlisted Navymen.

Recruit, built to the specifications of a destroyer escort on a two-thirds scale, is 225 feet long with a beam of 24 feet. She houses six classrooms on the second deck, three on the main deck. All of the ship except the frames, transverse beams, ground tackle and necessary fittings are made of wood. The wooden three-inch 50 caliber gun mounted forward of the bridge,



points and trains as easily as the standard service model. The anchors, chocks, bits and capstan are also made of wood.

On 29 Jul 1949, with all the ceremony prescribed for the proudest of Navy combat ships, Recruit was ready. Crowds gathered and speeches were made. At the first note of the bugle, the commission pennant was broken and the colors and jack hoisted—USS Recruit (TDE-1) was "in commission."

The land-locked ship has 29 instructors attached to her, composing the staff of the Seamanship Training Division. They teach classes in general drills, mooring, communications and recognition.

Since a different company makes up Recruit's watch section each night, many new Navymen get their first taste of the proper method of watch-standing as it is done aboard ship.

Every recruit receives a short tour of duty aboard the ship as part of his training. Practical demonstration in subjects formerly delivered in lecture form are made possible through use of the ship's equipment.

TAFFRAIL TALK

IN ORDER TO GIVE you a first hand report on the Navy, it's essential that we get away from our desks once in a while and observe the Fleet. Such has been the case in the past few weeks and it seems that the ALL HANDS staff has been spending more time away from their desks than behind them.

In the past month or so, we've made a number of field trips—been to sea in carriers, destroyers and nuclear submarines; visited many of the major naval installations and even flown on the latest types of aircraft.

In the course of these travels we have had the opportunity to talk to a lot of interesting people.

- We met an admiral. He commands one of the great naval bases. He's proud of the training there and takes pride in what the schools at his base are doing. "If only the American people could see what is being done here," he said. We saw the schools and some of their products. He has reason to be proud.

- We met a captain. He was a chief of staff. He told us about the ships of his command. He said they were versatile—killers of submarines, the weapon in being, the weapon of the Navy of today and of tomorrow. He convinced us. He had some mighty strong convincers—about 140 of them, around 2000 tons each.

- We met a lieutenant commander. He was in charge of a school that teaches Navy cooks and bakers to be even better cooks and bakers. We were impressed with the cleanliness, the ingenuity in preparation and the final product. "What we cook looks and tastes good," he said. We tried some—and agreed with him.

- We met a lieutenant junior grade. He was PIO of a naval station. "Come and see for yourself," he said. "We exist to support the Fleet and the schools that send men to the Fleet—but we're doing some mighty fine existing." We saw the schools, the barracks, mess halls, hobby shops, gymnasium and Rec Hall. We concurred, they're doing "some mighty fine existing."

- We met a chief petty officer. "These are certainly wonderful people they send us to train," he said. He was rugged Navy Blue—and doing a 4.0 job too.

- Then, there was a third class petty officer. We didn't meet him but we wanted to. He's Wayne R. Funk, BT3, USN, who was working in a compartment below deck in a DD when a boiler line let go. He chased his shipmates up the ladder. Then, he remained behind to cut the fuel line to the boiler and shut off the quick-close valve. Being the last to come up on deck, he quickly closed the hatch, halted the fuel pumps and shut the main stops on the boiler valves—all in an orderly manner—just as if it were an everyday routine. Witnesses figure the temperature was hitting around 300 degrees—live steam gets hot.

We didn't meet Boilerman Funk, but we'd like to. He's a hero, and a Navyman. Come to think of it, Funk is like a lot of Navymen—almost all of them we believe. They'll answer up when the chips are down.

As we said earlier, we meet a lot of interesting people on our field trips. We thought you would like to meet them too.

The All Hands Staff

The United States Navy

Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS the Bureau of Naval Personnel Information Bulletin, with approval of the Bureau of the Budget on 23 June 1955, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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• AT RIGHT: NEW Destroyer Pier No. 2 is seen between stern of USS Yosemite (AD 19) and bow of USS Cascade (AD 16), moored to Destroyer Pier No. 1 at Newport, R. I. 'Yo-Yo' is flagship for ComDesLant.




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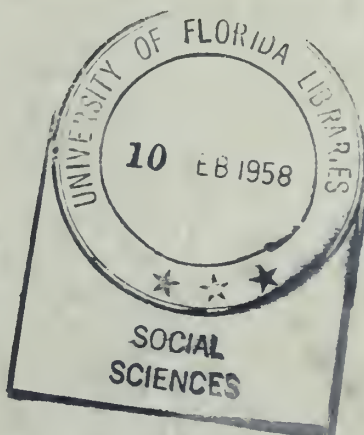
A black and white photograph of a large ship, possibly a naval vessel, at sea. The ship is dark and has a complex superstructure with multiple masts and antennas. It is moving through choppy water, leaving a white wake. In the foreground, a dark, rectangular object, possibly a buoy or a small structure, is visible in the water. The sky is filled with several thick, white smoke trails that curve upwards and outwards, resembling a stylized 'Y' or a branching structure. The overall tone is dramatic and industrial.

mobile power

ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

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for 10 readers. All should
see it as soon as possible.
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FEBRUARY 1958



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

FEBRUARY 1958

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NUMBER 493

VICE ADMIRAL H. P. SMITH, USN

The Chief of Naval Personnel

REAR ADMIRAL K. CRAIG, USN

The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN

Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor

John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdel, News

David Rosenberg, Art

Elsa Arthur, Research

French Crawford Smith, Reserve

Don Addor, Layout

• FRONT COVER: IRON MAN—James D. Carroll, FN, USN, bends strap iron to make a bracket while repairing forward gun mount of USS Hugh Purvis (DD 709). The destroyer was operating in Atlantic waters off its home port of Newport, R. I.

• AT LEFT: CARRIERS BY THE YARD — San Francisco Naval Shipyard had a lot on deck when Fleet aircraft carriers USS Hancock (CVA 19), left, USS Bennington (CVA 20), right, joined drydocked USS Oriskany (CVA 34) in SFNS.

• CREDITS: All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.





MODERN aerial photography stepped forward during the days of WW II, has become important 'eyes' for the Navy.

SHOOTING IT OUT

FROM THE AIR Chung-jojur-ri looked about the same as any other North Korean town. American pilots, headed for other targets, flew over it time after time without even bothering to take a second glance.

Then one day someone got curious about the peaceful-looking cluster of typical Korean houses, and they became the object of a special photo-reconnaissance mission. A Navy photo pilot winged in over the place, "shot it up" with his camera and dropped the exposed film off at the unit's photo lab for processing.

The finished prints were turned over to Intelligence, where photo-interpreters gave them the once-over. Under stereoscopic viewers the pictures soon revealed that there was much more to Chung-jojur-ri than met the naked eye. Instead of peaceful villagers, the place housed an interesting collection of enemy motor vehicles. The walls of several houses had been pulled down to make room for a complete maintenance shop.

It didn't take long for planes from *USS Kearsarge* (CVA ex-CV 33) to

blast the enemy's well camouflaged "little Detroit" clear out of business.

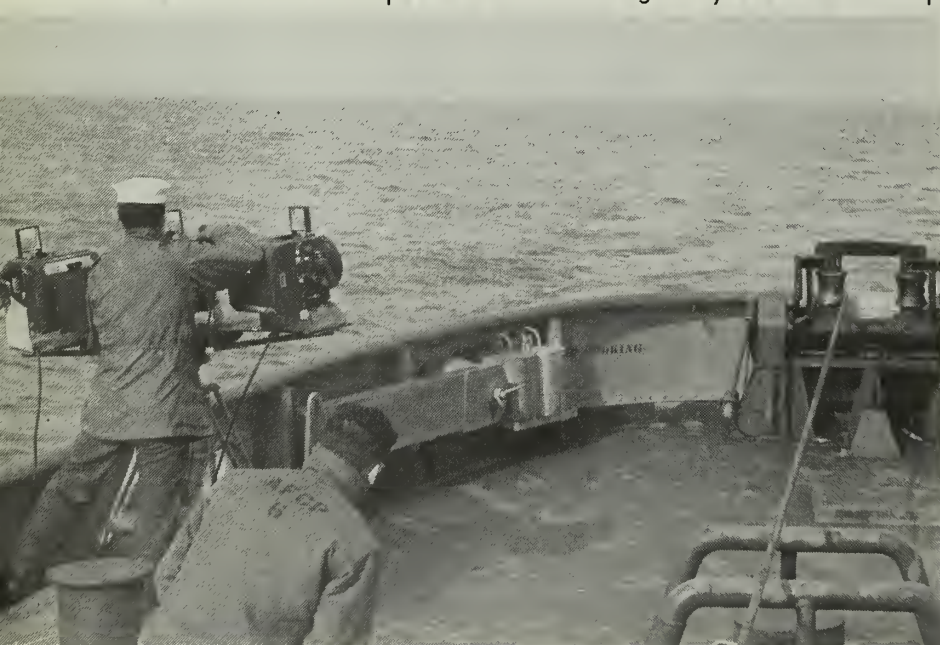
What happened to Chung-jojur-ri is typical of the destiny of many enemy installations in World War II and the Korean fighting. In both those conflicts, field commanders estimated that 80 to 85 per cent of their intelligence information came from aerial photo reconnaissance missions like the one that broke through Chung-jojur-ri's disguise.

As those figures show, aerial photo-reconnaissance is a pretty important part of the modern Navy's combat operations. But, important as it is, it's only one of many ways in which the Navy uses what is probably its most versatile weapon—the camera.

Today, photography is used in nearly every activity of the Navy—in wartime or peacetime—and under water, on the water, in the air or on the ground. Here are a few random examples:

- *Beneath the sea* the Hydrographic Office has taken pictures of the ocean bottom at depths of more than 20,000 feet to probe the secrets of Davy Jones' locker. Training films made under water are used to teach frogmen how to dispose of enemy mines and obstacles. And "fisheye" views of such subjects as torpedoes being fired, underwater explosions, hulls moving through the water or ships' screws turning are used in research projects to improve the navy's ships, weapons and machinery.

PHOTOGRAPHS IN ACTION — Armed with their ever trusty cameras, these PHs make an accurate and precise record of the gunnery exercise of a ship.





FIRST aerial photo for Navy was taken by W. L. Richardson, MM2c, in 1914. Right: Richardson goes airborne in 1916.

FOR THE RECORD

Photo reconnaissance goes underwater too. In the Second World War, U. S. submarines undertook special missions in the Pacific between September 1943 and December 1944 to take periscope pictures of enemy-held shorelines. Periscope photos were also used to verify ship sinkings in actual combat or on maneuvers.

• **On the surface**, movies and still pictures can be taken in the midst of battle to keep the public informed of what the Navy is doing, to provide a valuable historical record of the Navy's operations and to allow post-battle study of combat techniques.

Photos of battle damage to ships and planes make it possible to devise new protective measures and better methods of repair. And, microfilms of original blueprints, flown to a shipyard ahead of a damaged ship's arrival can cut yard time by as much as 25 per cent. Replacement sections for a wounded ship can sometimes be built and ready to put in place while the ship is still thousands of miles from the yard, thanks to microfilmed blueprints and damage photos.

Another important use of photography on surface ships is in gunnery practice, where Fleet Camera Parties take pictures of shell splashes which are measured to provide an accurate record of just how well a ship does firing at air or surface targets.

And, radarscope photography,

which makes it possible to compare the presentation on radar with a picture of what the scope should show at a given position, has become a valuable aid to navigation in darkness or fog.

• **In the air**, photo-reconnaissance is only one of many ways in which the Navy puts the camera to work. Aerial photo-mapping is employed to check the accuracy of old charts, to map previously unexplored areas

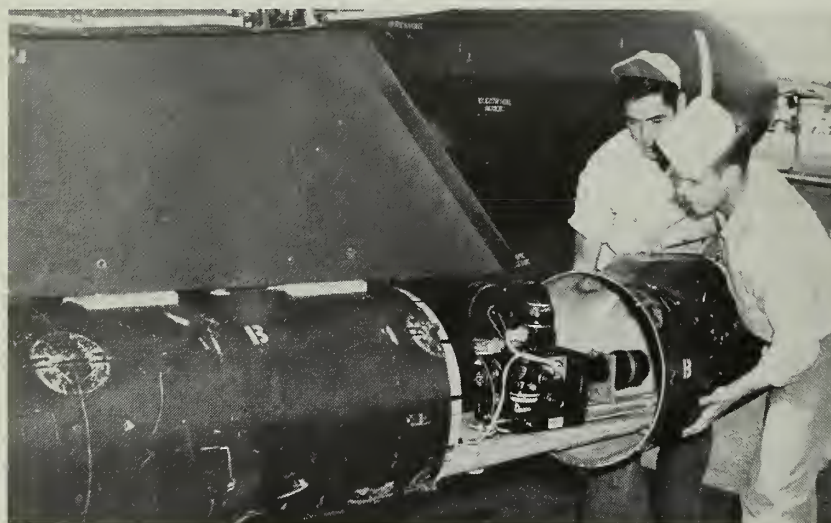
(the interior of Antarctica for instance) and to show ground commanders unfamiliar terrain. Photographs of aircraft accidents help investigating officers to establish the cause of crashes and to find ways to prevent them in the future. Fleet gunnery practice; formation flying technique; the effectiveness of camouflage; and the efficiency of smoke screens, Fleet formations and maneuvers are just a few of the

NAVY'S FIGHTING TEAM also includes a combat photographer who captured this exciting moment by getting into the thick of the battle.





ON THE PROWL — Jet photo team streaks over enemy country getting battle information. Below: Special pod camera for photographing missiles.



fields in which improvements can be made through the study of aerial photographs.

In tests of rockets and missiles the camera goes along to record the readings on the instruments they

carry, and cameras on the ground take pictures of launchings and flights to gather data needed for future experiments.

And, of course, there are gun cameras to show who did what to

whom in aerial combat or practice.

• **On land**, the Navy uses photographs to record the progress of construction; to show what happens when equipment is subjected to punishing conditions in the testing laboratory; to indicate damage done by fire, flood, storm, erosion, corrosion or neglect; and to accomplish countless other tasks.

Naval Observatory time, accurate to within several thousandths of a second, is determined through data automatically gathered by a photographic zenith tube, and the camera has become almost as important as the telescope in astronomy.

In Navy hospitals, photography is used in diagnosing some diseases, to train doctors in operating procedures and the recognition of symptoms and to provide a before-and-after record of bone and skin grafts. Microscope samples are photographed, so that doctors can study them at their own convenience and more easily compare one sample with another.

All this is a far cry from the early days of Navy photography, for even though the science (or art) is well over 100 years old, it took men a long time to realize that the camera was much more than just a device for "taking pictures" instead of painting or drawing them. For instance, aerial photographs had been made from a balloon as early as 1860, yet it wasn't until World War I that aerial photo-reconnaissance really began to come into its own.

One of the first "photographs following the battle" to be placed in the record files was by Matthew

WATER WORK — Cameraman goes below to realm of Davy Jones. Right: Special gear catches results of practice.



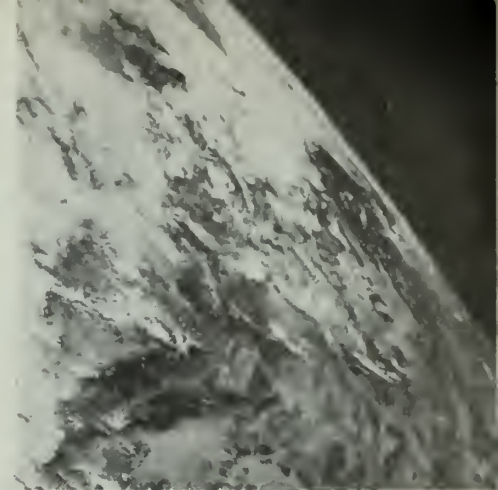
Brady, famed Civil War cameraman.

Brady took his historic shot on the Federal ironclad *Monitor* shortly after her momentous encounter with *Merrimac*. The print shows part of *Monitor's* crew standing about the deck. Some of the men are waving at the camera (even before television there were people like that) and others just look weary and slightly awed by the man with the box and black cloth. Brady didn't realize it at the time, but his picture presented an accurate record of the damage done to *Monitor* in the battle. At least five indentations in her turret attest the accuracy of the Confederates' guns and the strength of Yankee armorplate.

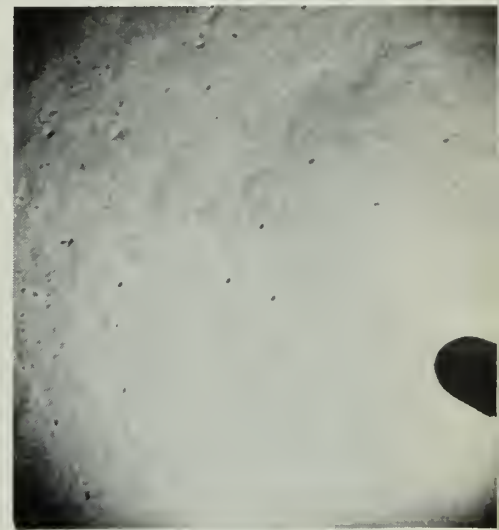
Between the Civil War and World War II, photography in the Navy was primarily pictorial — United States forces landing in Samoa in 1892, the first liberty party in Yokohama in 1907, the fighting at Vera Cruz, Mexico, in 1914, damaged ships in World War I and battle-wagons on maneuvers in the 1920s and '30s.

The Navy's first major use of the camera for other than historical, public information or recruiting purposes, was by the Bureau of Ordnance in gunnery exercises. A special set of cameras, much like those carried by modern Fleet Camera Parties, was used aboard surface ships to record the splashes of shot in the target area. By triangulation—the same method used today—the exact location of the shells when they hit the water was computed from the pictures.

When the "aeroplane" joined the



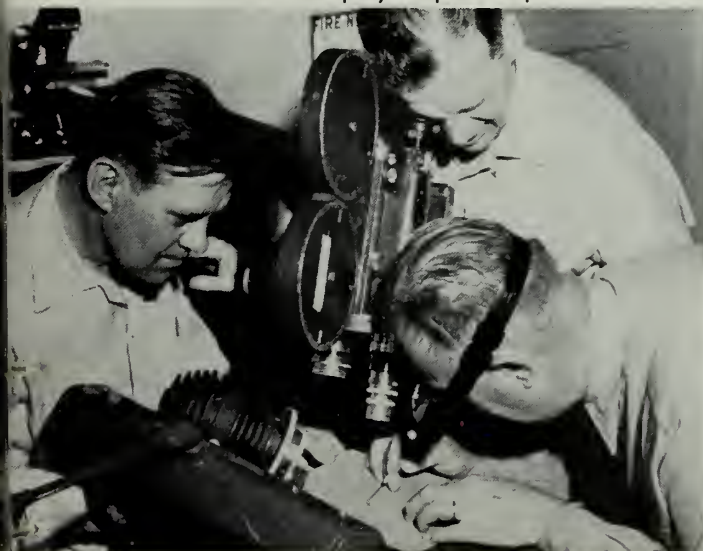
PHOTOS play an important part in developing tomorrow's Navy. Here cameras record (above) sun and earth, (below) projectile's path, ocean floor.



Navy back in 1911 another job was found for the camera; photos were used (in a somewhat haphazard way) to augment the records and show the results of structural failure in aircraft.

The first Navyman to be designated an official photographer was Walter L. "Uncle Dick" Richardson, a Ship's Cook, Third Class, who wandered into the field as a hobbyist. In the winter of 1915-16, while

NAVY PHOTOGRAPHY plays important part in medical research. Right: Fleet photographer stands by twin mount.





SHELL BURSTS are filmed by Camera Group during gunnery practice.

They Help the Navy to Fire Straight

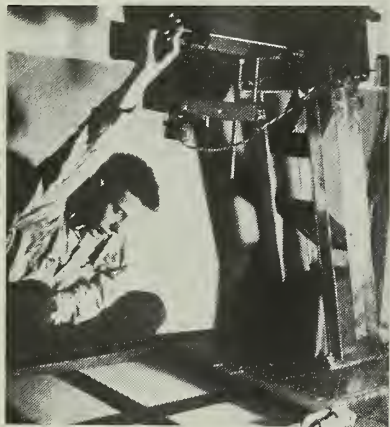
The mission of the Fleet Camera Group in the Pacific Fleet Training Command is to "photo-triangulate" surface and antiaircraft firing exer-

cises and furnish support with cameras in covering historical events.

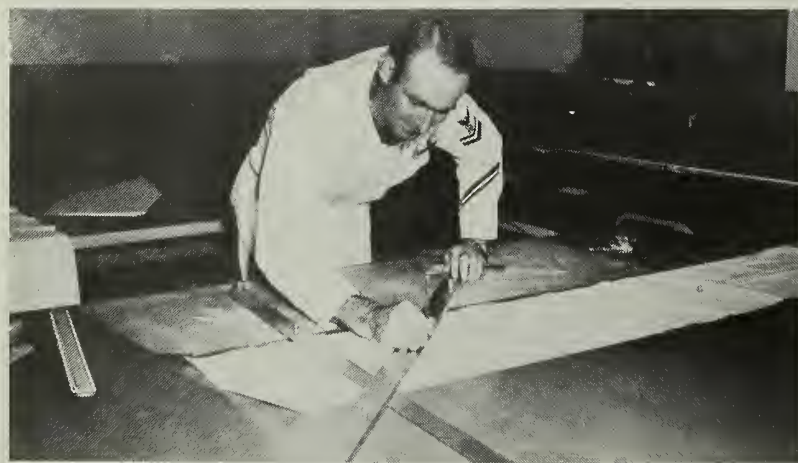
In the photo triangulation of gunnery exercises—which helps keep the Navy firing straight—the group shoots some two to three thousand photographs a month.

Every ship undergoing training with the Training Command receives the services of the Camera Group. Members of the group photograph each firing exercise of every ship, covering all phases of the shooting exercises. The recording on film of the location of each burst in relation to the target provides the ships with a "true picture" of the results.

The Group also functions as the photographic center for the Naval Station and makes from four to five thousand passes and identification cards each month.



BLOWUPS — Enlargements of firing photos are made by J. R. Berryman, PH2, giving record of practice.



SINISTER PLOT—J. R. Price, QM2, plots gunnery exercise. The plot will provide the firing ship with an accurate picture of the results.

stationed at Pensacola, Fla., he began snapping pictures of various activities connected with the operation of the Flight School. These proved so useful that Richardson was taken out of the galley and put into a broom closet—a broom closet which he made into a darkroom. However, he didn't spend all his time there. One day, with his cigar-box-style camera, he took to the air to make what is credited as being the first official Navy aerial photo.

A few months later Richardson was transferred to what later became the Bureau of Aeronautics to organize the Photographic Division and plan the establishment of a school for photographers. His plans were approved and he was commissioned and put in charge of that division.

The school Richardson had planned was established in the spring of 1918 at the Naval Air Station, Miami, Fla. All photographers available were ordered to it—along with anyone else who could pass the entrance exams. The course of instruction lasted six weeks, after which graduates were assigned to photo labs at various air stations in the United States and overseas.

With the World War I armistice, that school was closed, but the need for trained photographers soon became so acute that another one was opened in 1920 at Anacostia, D. C. (It was moved to NAS, Pensacola, Fla., in 1923 and is still there.)

In 1921, with the establishment of the photographer rating, it was evident that photography was here to stay. However it wasn't until World War II that photography took on the importance it holds today.

From a pre-war figure of thousands of dollars, the wartime photography budget reached a peak in the millions. Combat cameramen covered the war from Pearl Harbor to the Japanese surrender on board *USS Missouri* (BB 63). Reconnaissance photos helped pave the way for invasions. ID photos were turned out by the mile. Movies and slides were used in all sorts of training. And, overseas mail was put on microfilm so that it could be delivered faster and carried in greater quantities. After V-J Day the cameras went on shooting, and the Navy went on improving its photographic gear and finding new uses for it.

That trend continued during the Korean war and it's still going on today.

—Jerry Wolff.

ALL HANDS



IT ALL GOES TOGETHER — EM cleans, and lubricates camera. *Right:* Repairman needs magnifier for small parts.

Eye Doctors for Navy's Cameras



THE NAVAL PHOTOGRAPHER'S MATE of today, more than ever before, is assured of equipment well maintained by specially trained photographic repairmen, who understand the problems of the man in the field. These men are trained at the Camera Repair Class C School of the Naval Air Technical Training Unit, Naval Air Station, Pensacola, Florida, and are assigned Navy Enlisted Classification Codes as camera repairmen.

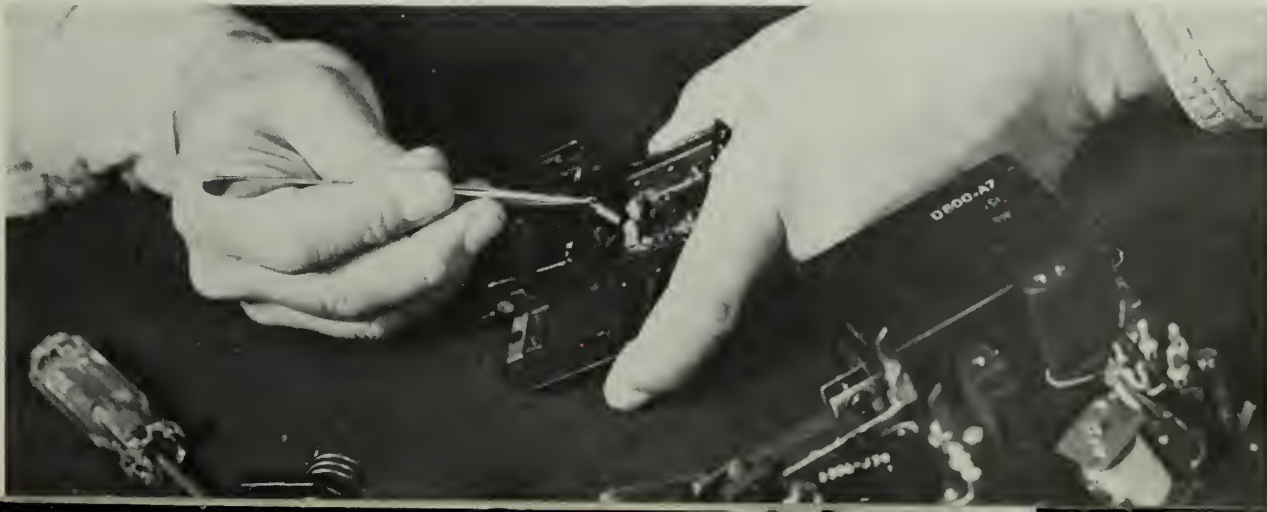
This 19-week course is designed for eligible photographer's mates, second class or above, with at least 18 months' obligated service.

Graduate repairmen who are interested in the field of instruction as well as photographic repair are the instructors. They constantly strive to reach the highest perfection in the class, using well designed lectures, visual aids, cut-away working models, three-dimensional drawings, installation boards, and technical assignments. Many of the units worked upon by the Navyman and used in the class rooms are far more complicated than delicate watches.

—Delbert Cass, SN, USN.



NAVY CAMERA PARTS are accurately filed. *Below:* Radar camera is repaired. *Right:* Wave operates an enlarger.





Hospital

go in combat, each step of the training at any of these schools is highly important.

When you check over the facts and figures of World War II, you find there were 1046 enlisted hospitalmen killed in combat. Of these, 563 were attached to Fleet Marine Force units. Of the 2843 corpsmen wounded in action, 2249 were with the Marines.

Seven Medals of Honor were awarded the Medical Department during WW II. All seven were to corpsmen and all of these were serving with the Marines at either Okinawa or Iwo Jima. For the most part, commendations accompanying these medals were: "... realizing that his own wounds were fatal, he staunchly refused medical attention for himself and, gathering his fast-waning strength with calm determination, coolly and expertly directed his men in the treatment of two wounded Marines . . ."

It goes right on down the line in medals awarded to corpsmen; Navy Cross, 51 to corpsmen with the Marines out of 67 awarded to hospital corpsmen and 388 Silver Stars to corpsmen with the Marines out of 464 awarded to corpsmen. During the Korean conflict, five of the seven Navymen awarded the Medal of Honor were combat hospital corpsmen. Of the five, four were posthumous awards. Here is the citation accompanying the Medal of Honor which was presented to one of the five—William R. Charette, HM3, USN.

"For conspicuous gallantry and intrepidity at the risk of his life above and beyond the call of duty as a Medical Corpsman, serving with a Marine Rifle Company, in action against enemy aggressor forces in Korea during the early morning hours of 27 Mar 1953. Participating in a fierce encounter with a cleverly concealed and well entrenched enemy force occupying positions on a vital and bitterly contested outpost far in advance of the main line of resistance, Charette repeatedly and unhesitatingly moved about through a murderous barrage of hostile small-arms and mortar fire to render assistance to his wounded comrades.

"When an enemy grenade landed within a few feet of a Marine he was

THE YOUNG MAN clad in Marine "utilities" crawled slowly forward on his stomach while short bursts of a thirty caliber machinegun sent slugs whistling past his head and exploding charges of TNT threw dirt in his already mud- and sweat-streaked face.

The beginning of a fiction story? Not at all. The young man could be any Navy hospital corpsman going through training at one of the Field Medical Service Schools at Camp Lejeune, N. C., or Camp Pendleton, Calif.

Since the Marine Corps has no enlisted or officer medical personnel of its own, naval personnel fill the medical billets in the Corps. The men wear Marine Corps uniforms with Navy rating badges on their left arm.

After graduation from one of the Class "A" Basic Hospital Corps Schools at Great Lakes, Ill., San Diego, Calif. or Bainbridge, Md., (now disestablished), corpsmen take

over their assignments in hospitals, at large shore stations or in ships. About 10 per cent of the corpsmen in the Navy are on duty with the Marines in peacetime.

Hospital Corps personnel are made available to the Atlantic and Pacific Fleet Service Force commands who are responsible for the assignment of personnel to the Commanding Generals, Fleet Marine Force, Atlantic and Pacific.

Once assigned to the Fleet Marine Force, corpsmen go to the Field Medical Service School at either Camp Lejeune or Camp Pendleton. These schools are quite unlike any you have ever heard of—no one flunks. Don't think for a minute that no one flunks because the course is easy. It is not easy for one simple reason—it can't be. In fact, it's rugged. At these schools corpsmen learn how to stay alive under battle conditions, and how to live like a Marine.

Since corpsmen go where Marines

Corpsmen on Field of Combat

attending, he immediately threw himself upon the stricken man and absorbed the entire concussion of the deadly missile with his own body. Although sustaining painful facial wounds, and undergoing shock from the intensity of the blast which ripped the helmet and medical aid kit from his person, Charette resourcefully improvised emergency bandages by tearing off part of his clothing, and gallantly continued to administer medical aid to the wounded in his own unit and to those in adjacent platoon areas as well.

"Observing a seriously wounded comrade whose armored vest had been torn from his body by the blast from an exploding shell, he selflessly removed his own battle vest and placed it upon the helpless man although fully aware of the added jeopardy to himself. Moving to the side of another casualty who was suffering excruciating pain from a serious leg wound, Charette stood upright in the trench line and exposed himself to a deadly hail of enemy fire in order to lend more effective aid to the victim and to alleviate his anguish while being removed to a position of safety.

"By his indomitable courage and inspiring efforts in behalf of his wounded comrades, Charette was directly responsible for saving many lives. His great personal valor reflects the highest credit upon himself and enhances the finest traditions of the United States Naval Service."

The citation is indicative of the courageous role hospital corpsmen play in battle. Their heroism in giving emergency treatment under fire and evacuating casualties to safety is one of the great humanitarian missions of combat. Their efforts helped save the lives of many men who might otherwise have died. Corpsmen learn how to keep themselves alive so that they, in turn, can save the lives of others. They get this training at one of the Field Medical Service Schools.

During the four weeks at either school, close to 11 hours are spent viewing training films. These cover 62 subjects ranging from Basic Map Reading and Effects of Atomic Blast to Asiatic Schistomiasis and Tsutsugamushi Prevention. Some of the

in-betweens include Evacuation of Casualties at Saipan, Transportation of Casualties, Medical Aid Men in Action, The First Aid Prevention of Shock, and Use of Whole Blood, Plasma, and Serum Albumin. There are many other hours to be filled.

The first hour of the first day at school introduces the corpsman to the aspects of Marine life. This takes in the subject of Traditions of the Marine Corps.

Some of the highlights of the course include: medical support in amphibious operations, lectures on land mines and booby traps, and demonstration and application of casualty carries. The students perform corpsmen duties during a simulated assault on a fortified position, in which Marines use half-pound blocks of TNT, 3.5 rocket launchers, flame throwers, hand smoke grenades

and rifle grenades.

But training doesn't end there. They find out for themselves what it's like to pitch a tent and take part in a night problem. There are amphibious principles, too, with debarkation, care and use of lifejackets and the inevitable climbing up and down landing nets on a mockup APA. Corpsmen get a taste of tank life and go to the range where they take part in demonstrations showing the capabilities and limitations of a tank, participate in a tank-infantry coordinated attack, tank casualty evacuation, tank assistance, casualty recovery, treatment and evacuation.

They won't be qualified radiomen when the course is finished, but they will know how to use a radio and field phone communications. They will find out what it's like to be flown in helicopters to forward areas,

AMONG FRIENDS AGAIN—Corpsmen bring wounded Marine behind lines in Korea. In a few minutes, helicopter will have flown him to protected rear area.





NAVY HOSPITAL CORPSMEN go in with first wave. Rt: Combination of copter and corpsmen makes life-saving team.

have combat indoctrination for mental conditioning by creeping and crawling through barbed wire, over logs and obstacles while actually under live machinegun fire and simulated incoming artillery fire. During this, all about the trainees are slugs from machineguns and exploding TNT. This is followed up by simulated first aid and mass casualty handling.

During the fourth week, there are lectures and demonstrations on embarkation and debarkation. The corpsmen draw 'C' rations, lifejackets and sleeping bags and participation in a battalion exercise using field gear and packs.

The field pack, which includes part of the items known as "782 gear," weighs about 60 pounds. Among the contents of 782 gear are a shelter half, two blankets, poncho, change of outer and inner clothing, extra boots, shaving gear, towel, haversack and knapsack, a day's ration, entrenching tool, helmet, belt with two canteens full of water and a first aid pouch. In addition to this, the corpsman also carries the Unit 1 Medical Aid Kit which weighs in at about 10 pounds and contains band-

ages, morphine, tourniquet, safety pins—even down to a thermometer which, as one HM who has served with Marines said, "I've never yet seen a corpsman use one in combat."

Another part of the training includes the setting up of a bivouac area and establishing security watches, embarking in DUKWs with field gear, rations and lifejackets for an amphibious landing. During the landing, HMs learn something about setting up battalion aid collection and clearing stations under fire, and how an infantry assault is supported. During this phase of training there are a simulated atomic burst, mass casualty handling, decontamination and evacuation followed by a critique on the landing. Then they set up camp installations and DIG IN.

Briefings are held on area and personnel security followed by the application and demonstration of hand grenades. During a night problem, corpsmen accompany a combat patrol and pick up pointers on administering company and battalion aid in support.

The Wednesday before graduation day there is another amphibious landing followed by an introduction

and application of the self defense art of judo and another night problem with infiltration and a surprise attack. During a blackout corpsmen help support an infantry attack which is sustaining heavy casualties.

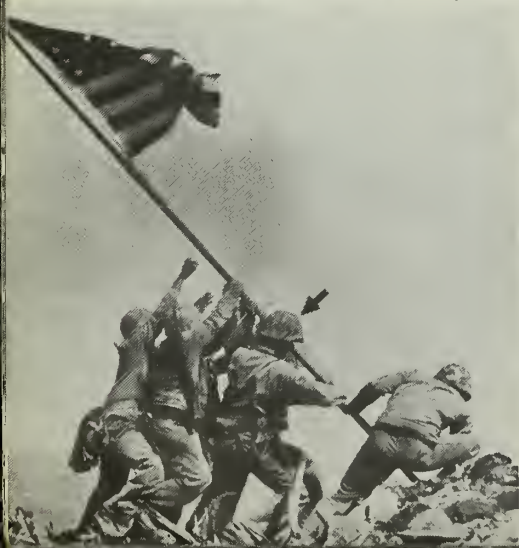
On Thursday, the bivouac area is policed. This includes the removal of all trip wires and filling in all fox holes and bunkers. After striking camp, they are required to return from bivouac to the barracks in small groups using a compass and maps to find six secluded check points en route.

Graduation day! They start off by cleaning and turning in the 782 gear. This is followed by a personnel inspection and a parade. Then, what the corpsman has been waiting for—graduation and liberty.

It is only after four weeks of instruction at one of these schools that corpsmen are assigned to a particular Fleet Marine Force unit. At that time they will be attached to and live with one specific company.

After assignment to a company, a corpsman's typical day will start with reveille at 0630 followed by a half-hour of calisthenics then breakfast. Between 0900-1000 he holds sick

RIGHT IN THE MIDDLE—Arrow points out corpsman in now famous Iwo Jima flag raising. Rt: First aid on battlefield.





FIELD EXERCISES give corpsmen experience in bandaging superficial wounds or assisting in the operating room.

call at battalion headquarters then works at the aid station until noon. At 1300 he falls out with the unit, taking part in drills and maneuvers. His liberty starts around 1630.

There is no special way for a corpsman to get duty with the Marines. But if you know of a corpsman who wants this duty, you can pass this information along. If he is already at sea, he could submit a request to the Fleet Commander via his commanding officer. And if an opening comes up he'd have a pretty good chance of getting it. If ashore, and eligible for sea duty but not on limited duty, he should indicate FMF duty on the Shorvey card.

Hospital corpsmen have been taking care of wounded Marines since 9 Feb 1799. It was on that date that the first loblolly boy (as hospital corpsmen were known then), John Wall, helped take care of American wounded while serving in *USS Constellation* when that ship soundly whipped the French frigate *L'Insurgente* in a West Indies battle off the island of Nevis.

Corpsmen accompanied Marines during the expedition to Panama in

1885. They went ashore with the Marines in 1898 at Guantanamo, and later, in 1914, at Vera Cruz. A year later they went ashore with the Marines at Bizoton, near Port au Prince, Haiti. In 1927 they were with the 5th and 6th Marine Regiments in Nicaragua. Their role in World War II and Korea is well known.

The corpsman learns fast the importance of his training and how to use his equipment. He also learns that at times it becomes necessary to improvise. One example of improvisation brought to the fore was the Gallegher Stretcher. It was named after its inventor, Chief Pharmacist's Mate John A. Gallegher, USNR, who was attached to the Marine's Sixth Division during the fighting in the rugged hills of northwestern Okinawa peninsula. It was called into play to carry wounded Marines over the tortuous hillside trails and down cliff-like embankments. Gallegher first saw the need for a carrier of its type during the Tulagi operation when corpsmen were unable to use rigid stretchers over cliff-studded terrain and were forced to use ponchos.

The Gallegher Stretcher weighed four pounds, six ounces, and was transported in a small pack attached to the cartridge belt. If rigidity was preferred, poles were inserted into its lengthwise seams. Three overlapping straps secured the patient in the lying position, while two other straps could be fastened around the thighs, similar to the way a parachute harness is applied, if the wounded man was to be lowered by line over an embankment. This stretcher could be carried by from one to six men, used rigid or otherwise and could be lowered by rope with the patient fully secure.

Wherever Marines are fighting, have fought or will fight, Navy hospital corpsmen too, have been or will be right there with them.

And the next time you run across the now famous photograph showing the flag raising on Mt. Surabachi, remember that there was a Navy hospital corpsman with the Marines at that time, too. The second man on the right in that picture is John H. Bradley, Pharmacist's Mate, second class, USNR.

—Thomas Wholey, JOC, USN.

INITIAL TREATMENT and first pint of blood give wounded strength to get to rear area hospital, or *Rt*: to hospital ship.





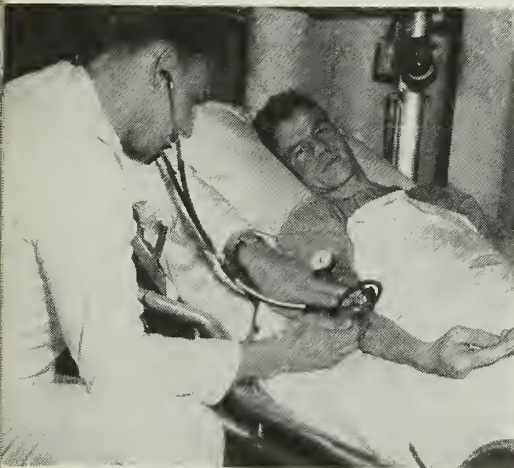
MEDICAL PREVIEW—New medical center is being built at Portsmouth on the grounds of Navy's oldest medical unit.

NAVY HOSPITAL

AN ULTRA MODERN hospital which will feature the best in patient treatment facilities, is being constructed on the grounds of the Navy's oldest medical unit, the U. S. Naval Hospital, Portsmouth, Va. The new structure, which will occupy a place in the Portsmouth skyline 16 stories high, will be surrounded by the 90 existing buildings of the hospital command which has served the Navy's sick and wounded for 127 years.

The modern design of the new structure will be in striking contrast to the Doric columns surrounding

SEA TO SHORE—New hospital at Portsmouth will have beds to care for 800 patients and if need arises can be expanded to take care of more.



the entrance to the present three-story main hospital building. These columns date to the original medical building opened during the administration of President Andrew Jackson.

It has been recorded that only one patient was admitted on the day the hospital opened in 1830. Today, it is not unusual to find as many as 100 patients entering the hospital in a 24-hour period.

Midway in the first year of the hospital's existence there were 36 patients. Today this same medical unit, expanded many times over, has an average patient population of 1300 military personnel and dependents, provides outpatient treatment for 7000 dependents each month and is the birthplace of 6000 babies every year. This demand coupled with the deterioration of the World War I and II temporary buildings now being used to complement the facilities of the main building, explains the need for the new structure.

The cost of the project will be nearly \$16 million when the building is completed around Christmas of 1959. Site work for the structure started in 1955.

The plans, consisting of some 214 sheets, call for a capacity of 800 beds with a "chassis" designed to service 1500. In other words, the building now under construction will have room for 800 beds in

wards and two-patient quiet rooms, but all of the services such as the surgical suite, X-ray suite, laboratories and other medical services, will be equipped to handle 1500 bed patients. The additional bed space would be obtained by adding another wing at some future date or continued use of certain temporary buildings.

The new structure will have a two-story rectangular base, 440 feet long and nearly 260 feet deep. On top of this base will rise a "T"-shaped structure which will reach a height of about 225 feet. The top of the "T" will run the length of the base at the back of the building and will be 11 stories high. The leg or vertical member will divide the base and reach the full 16-story height topped by an elevator penthouse. The 11-story portion will be 25 feet thick, while the leg of the "T" will have a width of 47 feet.

The building's foundation at one time had the appearance of a field of 12-inch steel pipes growing out of the ground. Into these tapered tubes, driven 40 feet into the ground, was poured concrete to give the building 2652 legs on which to stand. On top of this, workers fabricated a framework of steel reinforcing rods which was filled with concrete 50 inches thick to provide the ground level pad for the 16 story building.

Work on the superstructure began

in late summer of 1957. The 4900-ton structural steel frame will be encased in concrete. On top of the concrete will be placed a light gray colored brick coating divided into fields by concrete strips. The first and third floor concrete walls will be covered in part with porcelain finished metallic plates.

The pure "T" design of the superstructure will be disrupted by a series of staggered floors extending out of the left side of the leg above the two story base. They will rise in pyramid fashion to the fifth floor.

To visualize what the hospital will mean to a Navy patient, you must project yourself to 1960 when the interior will be completed and the building placed in service. A patient admitted to the hospital in that year will find it a model of efficient design. The layout of ward and treatment areas will minimize movement from one area to another and will reduce traffic in the building.

You will enter the building, which is surrounded by trees and overlooks the Elizabeth River, through either the main entrance at the base of the leg of the "T" or through an enclosed courtyard in the right side of the rectangular base, or be moved directly into the receiving and emergency units at the rear of the first floor. If your condition requires it, you will receive treatment in the emergency operating rooms on the first floor and be confined to bed in the receiving unit.

Your dependents will receive treat-



ONLY THE BEST—The modernistic medical building of gray brick and aluminum colored metallic plates will be ready to receive patients early in 1960.

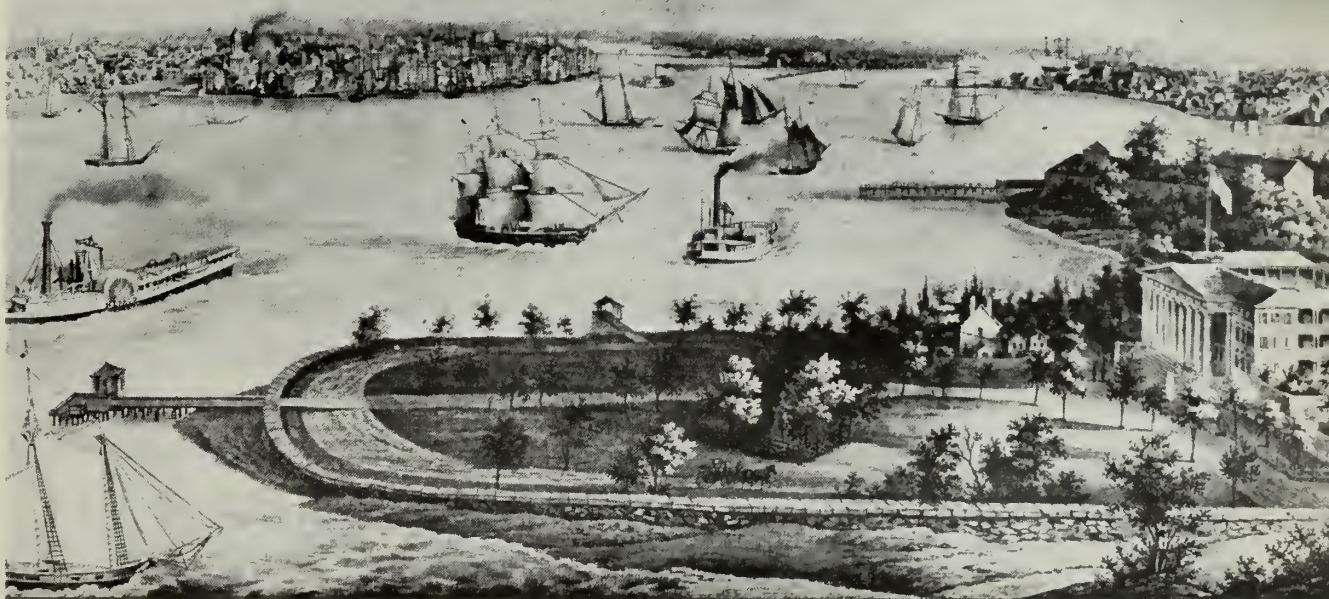
ment on the first floor in the outpatient clinic while studies of heart and respiratory ailments will be made in the cardiopulmonary functional laboratory also located on the ground floor. The administrative offices on the first floor and also on the second, would handle the paper work necessary.

On the second floor you will be able to deposit money in the bank, buy a stamp at the Post Office or cigarettes at the Navy Exchange. Your uniforms will be cleaned at the tailor shop and new heels put on your shoes by the cobbler. If not

confined to bed, you will pass the time in the game room or TV lounge or draw a novel from the library while the doctor does research on your case in the medical library. You might elect to attend a show in the second floor auditorium (458 seats) or spend some time in the 100-seat chapel.

Also located on the second floor is the master galley, one of the most modern features of the hospital. From the galley, food will move out to the adjoining mess hall, or will be assembled into complete meals and dispatched in special thermos

SAME LOCATION—Original medical building at Portsmouth was built in 1830 and looked like this in 1851.





FAMILY AFFAIR—New medical center will have the latest equipment and facilities for the Navyman's dependents in the modern T-shaped building.

containers to wards and quiet rooms. The containers will insure that the meal arrives piping hot. Special foods will be prepared in the diet kitchen next to the galley.

As a patient, you may be assigned to one of the beds in the 18 wards which begin on the third floor of the 11-story wing and extend to the top. Two 29-bed wards are on each floor, divided by a service core running up the center to the top of the "T." This core contains the nurses station, doctors' offices, examination and treatment rooms, visitors lounge and other ward support units.

The ward nurse will be able to keep each ward patient in view through a large glass window in her office. In certain patient areas such as the two-bed quiet rooms—the nurse will be able to converse with the patient over an intercom system. This hospital is one of the first Navy units to have an audio-visual nurse call system. Day rooms at the end of each ward and TV lounges will make your hospital stay

as pleasant as can be expected.

As a patient you would generally be assigned to the floor which also contains the clinics related to your treatment. In the event additional examinations or treatments are necessary you will travel from one floor to another via the eight elevators installed directly in front of the utility core in the leg of the "T." Seven of the automatically controlled, self-operated cars, will run to the 15th floor while the remaining unit will go to the top.

The elevator stop on the third floor admits you to the surgery unit which has eight operating rooms. Two of these are equipped for future installation of closed circuit television for use in studying operations or techniques. The two rooms will also have small viewing galleries for direct observation of the operation. All the associated surgery areas such as cleanup rooms, tissue and bone banks as well as offices, will be located on the third floor. So will the 17-bed recovery ward.

X-rays will be made on the fourth floor where orthopedic treatments will be given and the fifth floor will contain laboratories. The dental clinic will occupy quarters on the sixth along with the ear, nose and throat treatment area. The physiotherapy section will be on seven and the eye clinic on the eighth floor.

Quarters for officer patients will occupy the remaining ninth thru 15th floors of the leg. The majority of the 136 two-bed quiet rooms will be located there. However, six of the quiet rooms will be located in the service core on each of the nine ward floors.

A public address unit incorporated into the radio distribution system will carry messages throughout the

hospital while doctors will be alerted to calls over a visual nurse-doctor page circuit. All of the TV lounges, day rooms, and solariums will be serviced by a central antenna system. The radio system will provide you with a pillow phone at your bed which will allow selection of musical entertainment from local radio channels or from the hospital's own program of recordings. Speakers in certain areas will also provide similar entertainment.

In this structure the Bureau of Medicine and Surgery will place nearly \$1 million worth of new supplies and equipment. In addition, medical equipment from other buildings in the compound will be moved into the treatment areas of the building along with galley appliances and service units.

If the needs of the service ever outgrow the hospital, an additional wing can be added to the building. Provisions have been made for connecting an 11-floor structure to the back of the building. The corridor wing would join a second ward unit of equal height about 100 feet from the main building.

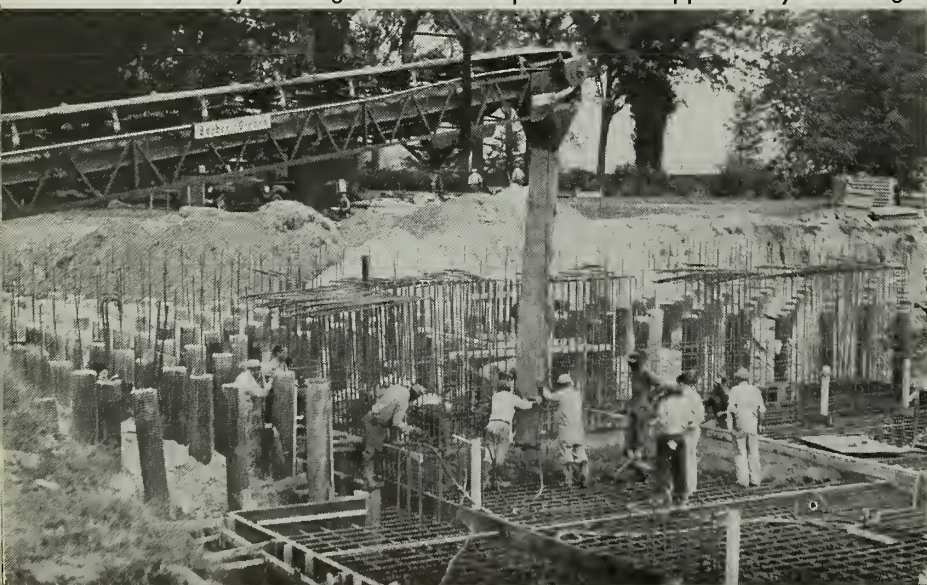
The new Portsmouth unit will be a valuable addition to the Navy's medical system which includes 23 hospital commands in the U.S., three outside the continental limits and the hospital ship *USS Haven* (AH 12). The medical commands are located at Chelsea, Mass.; Newport, R. I.; Portsmouth, N. H.; St. Albans, N. Y.; Philadelphia, Pa.; Bethesda, Md.; Annapolis, Md.; Bainbridge, Md.; Camp Lejeune, N. C.; Portsmouth, Va.; Quantico, Va.; Beaufort, S. C.; Charleston, S. C.; Jacksonville, Fla.; Key West, Fla.; Pensacola, Fla.; Memphis, Tenn.; Corpus Christi, Texas; Great Lakes, Ill.; Camp Pendleton, Calif.; San Diego, Calif.; Oakland, Calif.; Bremerton, Wash.; Guantanamo Bay, Cuba; Guam, M. I.; and Yokosuka, Japan. In addition, the Navy Medical Corps has detachments at various Army and Air Force hospitals.

The only other new hospital building being constructed by the Navy is at Great Lakes. It will be equal in size to the Portsmouth building and will be completed and placed in service in 1960. Both buildings will have important roles in the Navy's efforts to provide the best possible medical care for you.

—Bill Prosser, JOC, USN.

ALL HANDS

PIPE THIS — Concrete is poured into tubes in the foundation to form 'legs' on which 16-story building will stand. Hospital will be supported by 2652 'legs'.





Navy Nurse

WORKING UNDER THE bright lights of the operating room and in the hospital wards, highly skilled nurses perform an important role on the Navy's professional medical teams.

These are the heroines on Navy ships and stations—the women of the Navy Nurse Corps. During nearly a half century, since 13 May 1908, these women have cared for the sick and wounded of two World Wars and the Korean conflict. Their duties have taken place at naval stations throughout the world, at sea on board hospital ships and transports and in the air on board military hospital planes. In addition they give care and treatment to military dependents. Here's a picture story of busy nurses.

Upper left: Nurse shows happy Navyman his new son. *Upper right:* Moments are tense before the operation. *Right:* Nurse directs patient care in orthopedic ward. *Lower right:* Dependent care is a part of the nurse's duties. *Lower left:* Trained hands of a nurse assist doctors during surgery in hospital operating room.



Get Sett

at the same time would allow a spaceman freedom of movement.

The present suit provides a supply of pure oxygen at a pressure equivalent to that at 35,000 feet. This gives the man in the suit as much oxygen as he would get from breathing ordinary air at approximately sea level. The suit operates at this low pressure so that it will not be too bulky when used in space.

The space suit has undergone rigorous testing in the laboratory's four altitude chambers. In one test volunteer Richard J. McGowan, HMCA, USNR, put on the suit and entered a tank of brine which was at 28°F in a cold room where the temperature was -40°F. He remained in the tank for 54 minutes with no untoward effects.

To combat the heat and cold that might be encountered in space, the suit includes a ventilation garment which is essentially a suit of long-johns with tubes for circulation of ventilating air over the body.

In an altitude test of the suit, McGowan entered a chamber which was depressurized to simulate an altitude of 80,000 feet. After eight hours had passed, the observers outside the chamber were getting tired so they asked McGowan if he wanted to continue the test.

"You boys can leave," McGowan said, "Just send in a mirror and I'll observe myself."

The observers stayed and the test



ICED MAN—R. J. McGowan, HMCA, USNR, tests Navy's space unit immersed in tank of freezing brine with air temperature at minus 40 degrees Fahrenheit.

PLANNING A TRIP to the moon in the near future? If so, you'll want to be sure to visit the Air Crew Equipment Laboratory, exclusive haberdashers to men with that forward look.

For nine years the Lab, which is located at Philadelphia's Navy Base, has been experimenting with space equipment. It has come up with the United States' first space suit, one which will enable a voyager to leave a rocket ship to explore the surface of the moon.

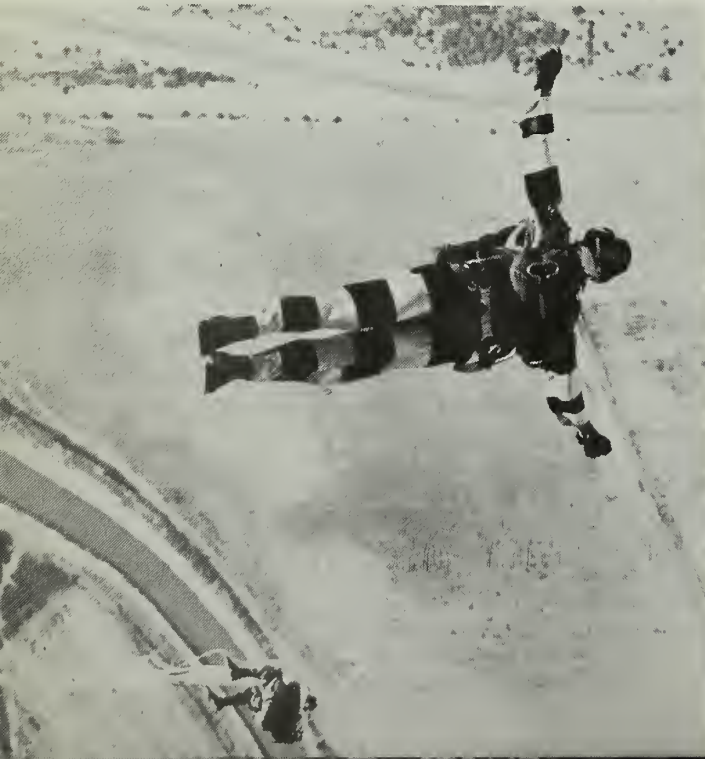
The space unit contains a sealed

in atmosphere which could sustain a man in a vacuum for hours.

The project started with an emergency full pressure suit for use by pilots at altitudes above a 45,000-50,000 foot altitude. At these altitudes even pure oxygen would have to be forced into the lungs at such pressure that the pilot could not exhale against it.

As Navy researchers made new improvements on each version of the pressurized suit, they eventually developed one which would work outside of the earth's atmosphere and

FREE FALLING chutists test flight gear and clothing at Parachute Unit, El Centro, Calif. Stripes aid observation.



for Space Travel

continued for three more hours.

The space suit has had at least one unrehearsed test which saved the life of a Navy pilot. While wearing the suit on a routine experimental high altitude flight for Navy Squadron VX-3 out of NAS Atlantic City, N. J., the pilot experienced an engine flame out resulting in an almost immediate loss of cabin pressure at 54,000 feet. The suit automatically inflated and enabled the pilot to bring his aircraft down to a safe altitude.

There are serious problems to be solved before man's first space voyage is possible.

The most important of these is the construction of a protective rocket ship which would not burn up as it re-entered the earth's atmosphere.

Another problem that requires investigation is the extent of cosmic radiation from the sun outside the atmosphere and beyond the influence of the earth's magnetic field. Exposure to extreme amounts of cosmic radiation would have the same effect as being too close to the fall-out of a nuclear explosion.

The psychological problems involved in traveling in the confinement of a space ship for long periods are at present being studied. Men have remained in submarines for over 30 days without ill effects. The Lab people believe, with proper selection, this problem can be overcome. They also think that man will be able to adjust to the weightlessness that will be encountered outside of the earth's gravitational field.

They are confident that the Navy pressure suit can be adapted for space use and for the extremes of temperature that exist in space. If it is used some day by an explorer on the moon, he would be able to carry a much larger supply of oxygen than he can on earth because the force of gravity on the moon is only about one-fifth as strong as the earth's. To combat the effects of the great acceleration necessary to propel a man into space, the man could wear an anti-G suit underneath.

If the voyager wanted to make an inspection of his rocket ship while in space, he could leave the craft through a pressure lock while wearing his space suit. Then he could propel himself around the ship with oxygen jets working off the suit's

supply. The space man would not fall far behind the speeding ship because there would be no atmosphere to slow him down.

To prolong the time that it is possible for a man to stay in the space suit, Navy researchers hope eventually to develop means for feeding and discharging body wastes. With these improvements a man could live in the suit for days.

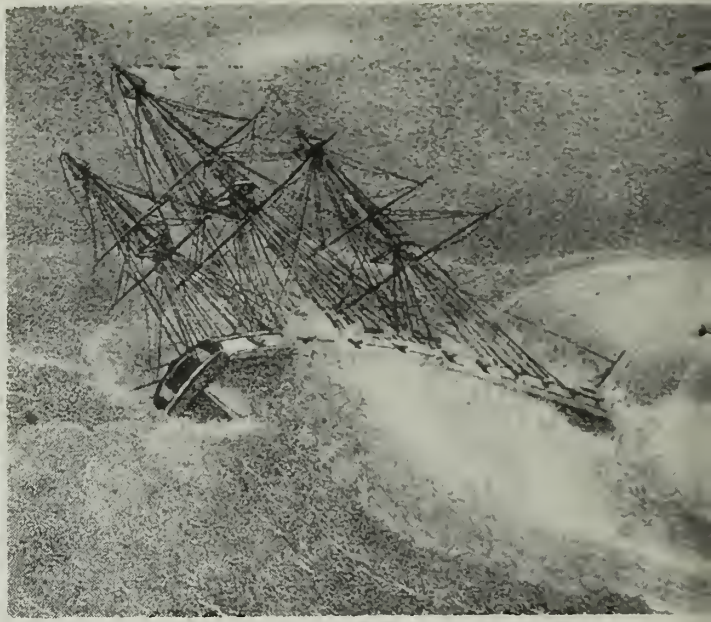
As the era of space travel approaches, the Air Crew Equipment Laboratory is continuing its efforts toward solving the problems that man will meet when he leaves the earth. Since there will be no source of water during a long space voyage, they have been working on various methods of reclaiming water that must not be wasted in the space craft. They also have been experimenting with chemical methods of absorbing exhaled carbon dioxide.

The confidence of the researchers in their space suit and in the future of space travel is reflected in Dick McGowan's hope that when the suit is first used outside of the earth's atmosphere—he will be wearing it.

The present pressure suits are being test flown at the Naval Air Test Center, Patuxent River, Md.; VX-3 NAS Atlantic City, N. J.; and VFAW-3, NAS Moffett Field, Calif.

SUITS NAVY—Out-of-this-world uniform contains sealed-in atmosphere for space travel. Below: Floating qualities of the space suit are demonstrated.





SLOOPS—Hornet No. 1, left, saw action during the Revolution. No. 2 was engaged in the Tripolitan War.

A Nest

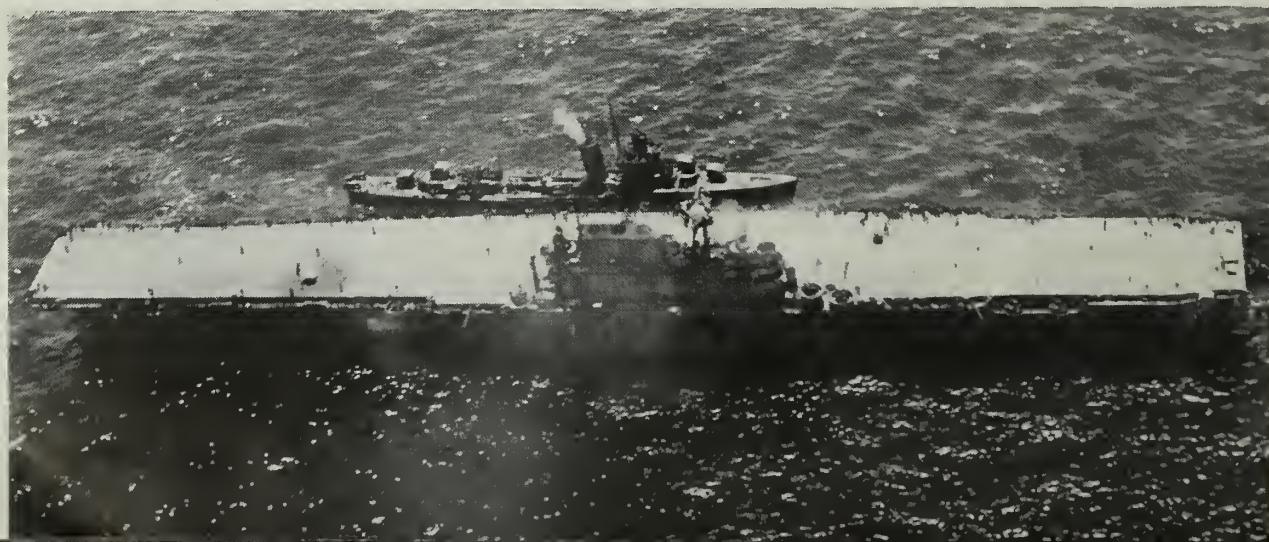
HORNETS HAVE BEEN BUZZING around our enemies' ears ever since 1775. In all, eight ships of every description, from sloops to the latest carriers have borne the name.

The first of the *Hornets* was a small 10-gun sloop commissioned in Baltimore in 1775. After several engagements in the War for Independence, she was overpowered by a British blockade below Philadelphia and her skipper, CAPT John Nicholson, scuttled his ship so that it wouldn't fall into the hands of the enemy.

The second *Hornet*, also a 10-gun sloop, participated in the attack on the Port of Derna on the Libyan coast during the Tripolitan War. Together with two other men-o'-war, she helped silence the Turkish shore



SEVENTH *Hornet* (CV 8) was lost in Battle of Santa Cruz. Above: No. 6, Spanish American War veteran.





No. 3 HORNET vs PEACOCK Rt: Hornet after conversion.

of Hornets

batteries enabling General Eaton's land forces to capture the city, which later proved to be the deciding action of the war. Hornet No. 2 was sold in 1806.

While her predecessor was engaged in the Mediterranean, the third *Hornet* was being built in the birthplace of the first of the line, Baltimore. She was a 20-gun brig modeled after French warships. At one point during the War of 1812, *Hornet* No. 3 sailed in company with the famous *Constitution* on a cruise in South American waters. During this cruise, but after leaving *Constitution*, she captured several prizes, the greatest of which was the brig *Resolution* with \$25,000 in specie

aboard. Later, while on the same voyage, she encountered another British brig, *Peacock*. The two ships exchanged broadsides for more than two hours leaving the British ship foundering. The skipper of *Hornet* sent some of his men aboard *Peacock* in a vain attempt to keep her afloat. She sank carrying with her nine of her own crew and three crewmen of *Hornet*. Before the end of the war, *Hornet* was in several more engagements. Following the war, she saw action against African slavers and Cuban pirates between the years 1815 and 1829. She took her last cruise in 1829. In that year, she was driven from her moorings during a storm and when all was clear

was never heard from again.

The career of *Hornet* No. 4 was perhaps the least colorful of the lot. She was a small five-gun schooner built for a mere \$2200, and was used primarily for inshore patrol work and as a dispatch vessel.

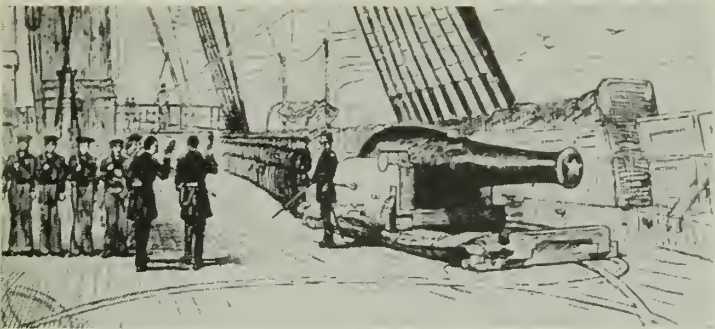
The fifth *Hornet* was rather special in two ways. An iron side-wheeler, she was the first *Hornet* to be steam-propelled and she was captured from the Confederates in 1864. Together with *Rhode Island* she received the surrender of the Confederate ram *Stonewall*.

The sixth ship to be named *Hornet* was a converted yacht. Although she was armed with only three six-pounders, two one-pounders and



DEFENSIVE batteries of today's carriers have little in common with offensive weapons of Civil War period.





INSPECTIONS AND General Quarters evolutions have not changed much from iron men and wooden ships days.

four machine guns, she distinguished herself during the Spanish-American War. In company with two other converted yachts, she encountered a Spanish squadron of nine ships including one cruiser, four gunboats, one torpedo boat and three smaller vessels. In a matter of three and a half hours, *Hornet* and Co. managed to sink or disable the whole squadron. In this action, *Hornet* fired almost 700 rounds and suffered no casualties.

Probably the best remembered of the *Hornets* was the first aircraft carrier (CV 8) to bear the name. Her squadrons left a trail of destruction in the early stages of WW II but her most memorable moment took place when she served as the springboard for LTGEN (then BRIGEN) Jimmy Doolittle's famous raid on the Japanese mainland in 1942. In October of that year, *Hornet* carried on a tradition of her forebears. No *Hornet* had ever been sunk or captured by an enemy. Badly damaged after being under attack for 10 hours in the Battle of Santa Cruz, *Hornet* No. 7 was torpedoed by our own destroyers to prevent her from falling into enemy hands.

Not a year elapsed before another *Hornet* (CV, later CVA 12)

appeared on the ships' register.

When her keel was laid, she was to have been named *uss Kearsarge* but when the news of *Hornet* No. 7 was received, it was decided to give her the famous old name so that there would again be a *Hornet* in the Navy.

A curtailed shakedown cruise was necessary to rush the ship into service with the Pacific Fleet. A two weeks' cruise to Bermuda, and back, enabled her crew to conduct exercises in gunnery, fueling, various calibration tests, test firing of her numerous batteries in addition to flight operations.

Early in her career, a few months after she joined the Pacific Fleet, *Hornet* had the chance to avenge the sinking of her immediate predecessor. Late in the afternoon of 20 Jun 1944, in the vicinity of the Marianas, the Japanese Fleet was engaged by the Task Force of which *Hornet* was a part.

It was during this fighting, later to be known as the First Battle of the Philippine Sea, that *Hornet's* squadrons bagged one of the enemy's largest carriers and scored torpedo and bomb hits on a cruiser and a carrier. Although many planes were damaged, all but one bomber crew were recovered or rescued.

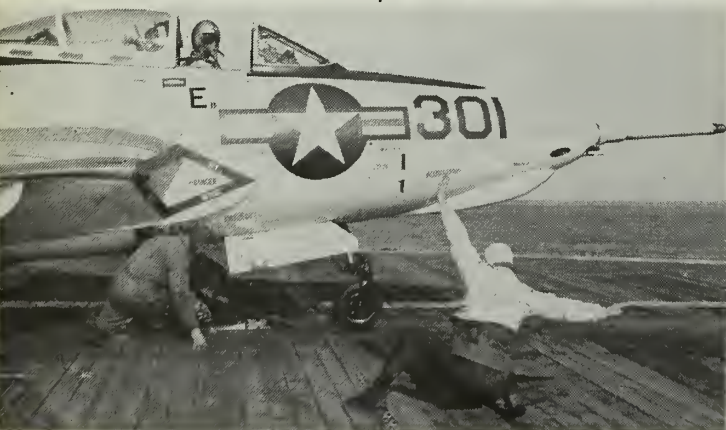
Later that summer, *Hornet* made what was believed to have been the closest approach by a surface ship to the Japanese mainland up to that point in the war, when she sent search planes to within 175 miles of Honshu and cruised within 400 miles of the same coast.

CV 12 and her squadrons figured in almost every major campaign in the Pacific Theater. *Hornet* built up a proud record in planes destroyed, both in the air and on the ground, in naval and cargo ships sunk, in softening up such targets as Truk, Eniwetok, Iwo Jima, Luzon, and Okinawa and in assisting in the invasions of Leyte, Iwo Jima and Okinawa.

During "Operation Magic Carpet" after the war, *Hornet* was used as a troop transport to bring veterans back to the West Coast.

She was decommissioned in 1946 only to be recalled in 1953. After more than three years of operations in the Pacific, *Hornet* entered Puget Sound Naval Shipyard for a seven months' streamlining period which fitted her out with an angled flight deck, hurricane bow, deck edge elevator, and other improvements. She returned to the Fleet in August '56, modernized and ready to carry on a proud name. — Robert S. Marx.

JET READIED for catapult take-off. Rt: *Hornet*men handle delicate job of loading ammunition with speed.





Snow Job

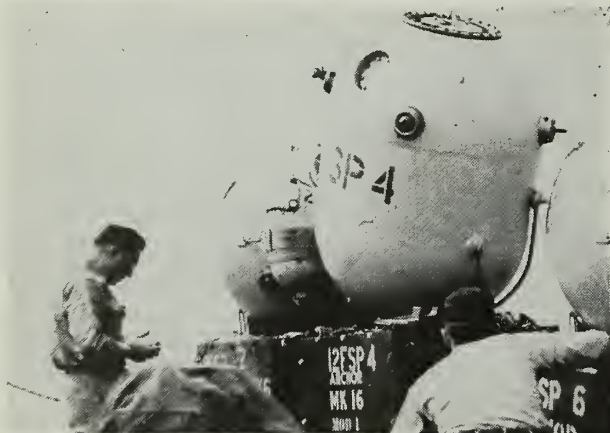
THE MASTER TRAINMAN Casey Jones would be showed under by the problems confronting Navy's train in Antarctica. Unlike Casey these bluejacket "trainmen" have no shiny rails to guide them nor smooth road for their vehicles. With snow and winds blinding their vision they must make their way over 640 miles of ice and snow pocketed with hidden crevasses. They are hauling important supplies from Marie Byrd Land to Little America in connection with Operation Deep Freeze III. Their train is made up of special snow tractors and sleds designed to make the best of the difficult travel conditions.

Top: Snow train moves out across barren snow fields. *Right:* Weird looking gear mounted on tractor detects crevasses and blazes trail ahead of tractor train. *Lower right:* Navy men and tractors assemble for the 640-mile trek across the frozen waste. *Lower left:* Navyman re-flags the trail during blinding snow storm.

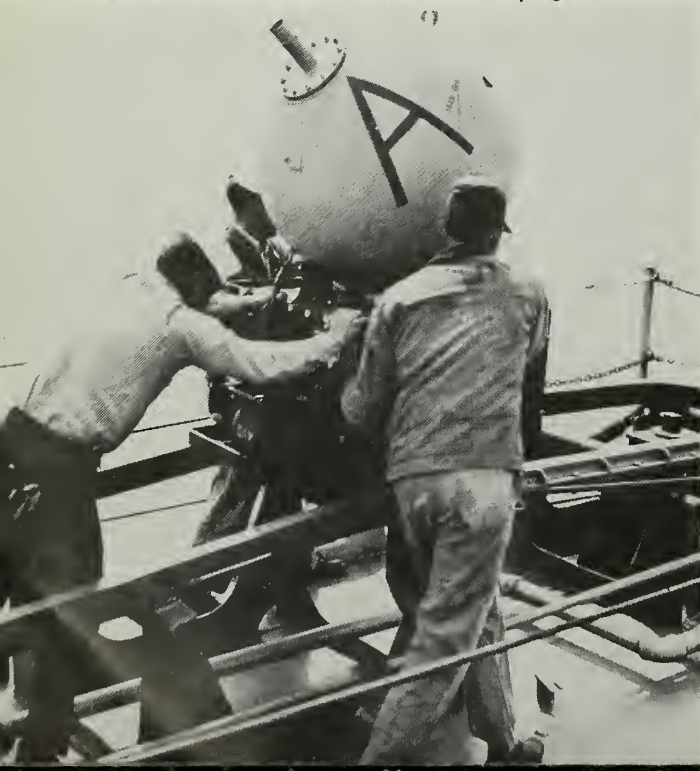




FINAL check is pulled to assure top-notch operation of mines. Below: Last-minute inspections are made.



LAUNCHING track on DM eases minelaying from fantail.



DELICATE touch of MN necessary before launching mine.

Iron Sea Monsters

IN TODAY'S NAVY of tomorrow, minelaying, an important function of naval power, is carried on by a group of men who have the nerves of a tight-rope walker, and the training and ingenuity of a scientist-inventor.

Many of these MNs, who are graduates of the Mine Warfare Schools at Yorktown, Va., find themselves on board mine-laying ships launching various types of mines.

One of the important jobs in minelaying is the last-minute adjustment, such as activating certain mechanisms left in non-service condition and removing various safety devices. This job is performed almost with split-second timing. It demands great skill, and, above all, utmost accuracy.

When all is ready, the releasing gear is operated and the "sea monster" takes up its position in the water, there to wait silently until the enemy ship approaches.

Mines perform the job of keeping the enemy out of areas where he is not wanted. The mineman rarely sees the results of his work—and it's quite unlikely that he would hear about the results until well after the battle. But mines and minemen continue to be an important part of the "new look" in the Navy's nuclear-atomic Fleet.

The pictures on this page show the minemen of USS *Shea* (DM 30) in action while on training exercises.

POSING POSITION—USS *Shea* (DM 30) is trim minelayer.



ALL HANDS

LETTERS TO THE EDITOR

Statutory Limit on Claim

SIR: A Chief on board informs me that he never received survivor reimbursement for personal items lost at Pearl Harbor on 7 Dec 1941 while serving in *uss Oglala* (CM 4). Is he still eligible under Article A-5101 of the *BuPers Manual*? This article contains provisions for such reimbursement, but refers to various laws which we do not have copies of on board. It also says in effect that claims must be presented within two years after peace has been established.

If the Chief is still eligible, to whom should he submit his request, and what information should be included incident to such claim?

Another question concerns a man who retires on 19 and six and is later recalled before the completion of 30 years and fails to pass his physical qualifications to reenlist. Is he eligible for severance pay? To my knowledge this is strictly rumor, but several Chiefs have asked about it and I can't give them a straight answer. Can you help?—B.A.F., YN1(SS), usn.

• Time has run out for the Chief who lost his personal effects while serving in *Oglala* (CM 4). The claim as outlined in your letter should have been filed not later than 3 Jul 1953. Since it was not filed within the statutory period, it would be necessarily denied, according to our experts.

Any question concerning retirement is an important one in the Navy so we again turned to the experts to find an answer for your second question. Personnel who were transferred to the Fleet Reserve and released to inactive duty upon completion of 19 years and 6 months of service and are later found not physically qualified are placed on the retired list by reason of physical disability. This is in accordance with the Naval Reserve Act of 1938 (Section 6331, Title 10 USC). They would not be recalled and discharged with severance pay. In this case, the action would be the same whether the individual had completed the 19 years and six months of service or a full 20 years.—Ed.

Cut Off Date for Officer's MOP

SIR: It has been brought to my attention that mustering out pay, under the Veterans Readjustment Assistance Act of 1952, will terminate for any commissioned officer, otherwise entitled, who is discharged or released from active service more than three years after 31 Jan 1955 (Navy Comptroller Manual, 044165, Subsection 7).

I am interested to know when such

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

a cut-off date was established, and if any extension of the cut-off date—31 Jan 1958—is contemplated for people in my category.

Upon completing three years' active service in July 1957, I extended my active service for a two-year period. If, instead of extending, I had elected to be released from active duty, I would have received \$300 MOP at that time. However, I unknowingly jeopardized my MOP when I chose to remain on active duty beyond the cut-off date.

I know there are always the "10 per cent" who never get the word, but I am sure I have many colleagues on extended active duty who will be as startled as I was when informed of the cut-off date. Maybe this letter will inform some other "uninformed" poten-

Top Multiple Score

SIR: During a recent "bull-session" the subject of discussion was focused on examination marks. Was I correct in saying that under the Navy's present scoring system for advancement in rate, the highest mark obtainable is 150?

To settle another point, can you tell me what are the three highest scores registered in an examination for promotion to E-7 (CPO)?—G.O.McG., BMC, usn.

• Chief, before you get into any "hot" arguments about final multiples, you'd better catch up on your reading and get the latest word. It is now possible, and has been since the August '57 examinations, to attain a final multiple of 180. This is broken down as follows: 0-80, examination score; a maximum of 20, for total active service; 20, for service in pay grade; 10, for awards, and up to 50 points for performance. (See pages 44, 45 and 46 of the Aug. 1957 issue of ALL HANDS for a detailed rundown.)

So far as your second question goes, it is regretted that examination scores for service-wide examinations are not disclosed by BuPers.—Ed.

tial extendees.—E. D. M., LTJG, USNR.

• On the surface, it would seem that you've received a bad deal. However, many officers are in the same boat.

MOP was set up primarily to benefit the non-career man whose civilian life was interrupted by service during the Korean emergency (although it also worked to the advantage of the career enlisted man and those career officers leaving the service before the cut-off date). The fact that someone agrees to remain on active duty after he could have been released is in effect a pretty good indication that his civilian life isn't too greatly interrupted, so that's how come you came to be left out. Naturally, it would have been better if you had known beforehand your extension would cost you your MOP, but as you say, there are always the 10 per cent.

The cut-off date was determined in a Presidential Proclamation of 1 Jan 1955. Therefore, you had about two and a half years in which to get the word.

At this time there is no legislation pending which would extend the cut-off date for officers in any category.—Ed.

Extensions for Reservists

SIR: I am a Naval Reservist with 11 years of active duty. Since I am over the age limit for transfer to the regular Navy, I am told I cannot extend my active duty period for more than a year at a time. If such is the case, I'll never have more than a year of obligated service. Therefore, will I ever be eligible for shore duty under the new Shorevey/Seavey concept?—J.W.H., BM2, USNR.

• You will be eligible for shore duty under Seavey when you meet the requirements set forth in the latest BuPers notice which pertains to your segment. However, under normal conditions, a minimum of one year's obligated service is needed to be ordered to shore duty within the continental U. S. under Seavey. This obligated service is computed from the month of transfer.

Naval Reserve personnel on active duty are not limited to extending their active duty to one year periods. According to BuPers Inst. 1133.10A, Naval Reservists on active duty may obligate themselves to perform additional active duty for periods of 12, 24, 36 or 48 months. If you wish to insure receipt of shore duty orders, it is suggested that you execute an agreement to obtain the necessary obligated service.—Ed.



IN HER DAY—Battleship USS Arizona (BB39) sails majestically through the seas in formation with other battlewagons during maneuvers at sea.

SIR: As a survivor of Pearl Harbor, may I strongly support the proposal by Chief Boatswain Bailey, published in the October ALL HANDS (page 33), to the effect that ships render passing honors to the remains of *uss Arizona*?

I disagree emphatically, however, that this should merely be a matter of tradition or custom. As you suggest in your editorial note, traditions are spontaneous and often arise quite casually. I doubt seriously, as a practical matter, that any great number of ships' captains, especially in these days of the finger-on-the-number, are going to undertake (spontaneously) any such conspicuous and official action as rendering passing honors.

Obviously, the answer is to *prescribe* the rendition of such honors to *Arizona*, in exactly the same way as commemorative passing honors are now prescribed for ships passing Mount Vernon (see *Navy Regulations*, Article 2185).

Chief Boatswain Bailey has made a notable recommendation. Don't let it die on the vine.—R. D. Heintz, Jr., COL, USMC.

SIR: I read with interest CHBOSN Bailey's letter concerning rendering passing honors to *uss Arizona* (BB 39) in the October issue of ALL HANDS, and I am in complete accord with his views on this subject. For the record, I have served in two ships since World War II that have entered Pearl Harbor on different occasions and each time we rendered honors to *Arizona*. The ships were *uss Valley Forge* (CVS 45) and

New Jersey (BB 62).

I, along with Mr. Bailey, and I'm sure many others, would like to see this become a Navy tradition. I had several friends in *Arizona* and I have always taken pride in rendering a salute to the memory of these men and the ship in which they served.—R. L. Moore, GM1, USN.

SIR: While in command of *uss Kenneth Whiting* (AV 14) from July 1953 to July 1954 and *uss Princeton* (CVS 37) from January 1956 to January 1957, I passed *Arizona* on several occasions. Each time I rendered passing honors just as though she had been a commissioned ship moored at the dock. I cannot remember whether there was something in the SOPA Instructions which called for these honors or not. Perhaps it was done on my ship because *Arizona* was my first ship as an officer in the Navy—way back in 1931. At any rate, I agree with CHBOSN Bailey that honors should be rendered.

If it is not contrary to Naval Regulations, customs or traditions, and it is not now included in the SOPA Instructions, I believe instructions should be issued so that all naval vessels would render passing honors to the *Arizona* Memorial.—W. E. Gallaher, CAPT, USN.

SIR: I wholeheartedly agree with the letter in the October issue of ALL HANDS submitted by CHBOSN Bailey about rendering honors to *Arizona*

Passing Honors

(BB 39) at Pearl Harbor. I believe this is the least we, the living, can do to honor those fighting men entombed in the hull of that great ship. If tradition is sparked by the men of the service, I sincerely hope that CHBOSN F. E. Bailey is credited with establishing the tradition of rendering honors when passing *Arizona*.—D. L. Foster, RMC, USN.

SIR: CHBOSN Bailey may be interested to know that a great many ships do render passing honors to *Arizona*. I have noticed during my three years in this area that carriers invariably render honors, cruisers usually do, destroyers sometimes, and other types rarely. So the tradition to which CHBOSN Bailey refers appears to be growing.—H. M. Easterling, CDR, USN.

SIR: In the October 1957 issue of ALL HANDS, CHBOSN F. E. Bailey, USN, has suggested that Navy ships render passing honors to *Arizona*. Mr. Bailey is mistaken if he thinks that all ships ignore such a courtesy. During the most recent deployment of *uss Philippine Sea* (CVS 47) we operated out of Pearl Harbor from the middle of January through March 1957; it was our practice to render full honors to *Arizona* upon each passing.—R. F. Ranney, ENS, USN.

SIR: There is no need for "tradition" to call for rendering passing honors to *Arizona*. *Navy Regulations* spells out the requirements for passing honors between ships of the Navy. In 1953, *uss Manchester* (CL 83) was required

REMEMBERED — Wreath at foot of flag is



to USS Arizona

by cable laying operations to go "the long way" around Ford Island on her departure from Pearl to Long Beach. Passing honors to *Arizona* were rendered.

I believe it is considered that ships in the usual channel, between Ford Island and Pearl Harbor Shipyard, do not pass *Arizona* and, therefore, passing honors are not appropriate. However, ships which do not render passing honors to *Arizona* when going the long way around Ford Island are incorrect. —B. D. Ross, LT, USN.

SIR: It was with surprise that I read of the recommendation in your October issue of rendering passing honors to *Arizona*.

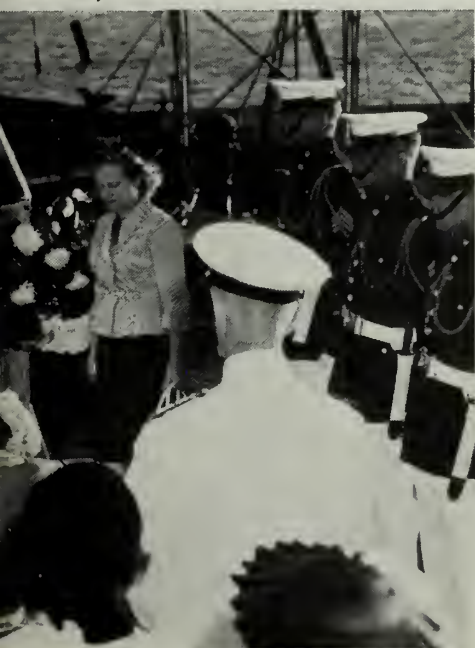
As Commander of Pearl Harbor-based Destroyer Division 252 (uss *Epperson*, DDE 714, *Renshaw*, DDE 499, *Philip*, DDE 498, *Nicholas*, DEE 449), I can positively state that honors are rendered. This tradition has been in practice well over a decade.

Be assured that our Pearl Harbor ships of CruDesPac, ServPac, SubPac and ComFourteen have not forgotten *Arizona* and the lessons she has bequeathed to succeeding generations. —H. I. Mandel, CAPT, usn, ComDesDiv 252.

SIR: In reference to the article by F. E. Bailey, CHBOSN, about rendering honors to *Arizona*. He states that in many instances honors are not rendered.

While operating out of Pearl Harbor last July, USS *Bon Homme Richard* (CVA 31) always rendered honors to *Arizona* as did the destroyers. Other

n memory of men entombed in hull below.



FINAL BERTH—Aerial photo shows USS *Arizona* today. Her decks are 15 feet below surface and a platform and flag have been erected on superstructure.

men I have talked to said that while in other ships they also rendered honors to *Arizona* when passing.—Bart West, AQ3, USN.

SIR: We sincerely agree with the Bos'n in that *Arizona* should not be forgotten and always remain in the memory of all Navymen and the people of the United States. The reason for this letter is to rectify one error in Mr. Bailey's letter which could give Navymen, not in the know, especially Atlantic sailors, the wrong idea.

I have been in several carriers and, going into and out of Pearl, we have never failed to go to quarters for Passing Honors when going by *Arizona*. Also, when we were moored on the far side of Ford Island, the coxswains of all the boats would render a hand salute when passing her.

I have checked with other people who were in other ships at one time or another and they cannot remember their ships ever not passing honors. We want the uninformed to know that we, of the Pacific Fleet, haven't forgotten *Arizona* and the Navymen entombed below decks.—C. W. Mainelli, AEC, usn.

SIR: One thing we still haven't got straight. Is or is not, *Arizona* still in commission.—J. B. Etchingham, FP 1.

• As with all Navy ships sunk or destroyed, their names are stricken from the list. Actually, when a ship is sunk, there is no occasion for it to be officially decommissioned.

On 7 Mar 1950, an order was issued that the flag of *Arizona* should be raised and lowered as though on a commissioned ship.

The way it looks to us here, it would seem that the tradition suggested by CHBOSN Bailey is well underway.

In this connection we should like to pass on to those interested in preserving this tradition, a communication from the Commandant, 14th Naval District:

"The Pacific War Memorial Commission, an agency of the Territory of Hawaii, which expects to sponsor a fund-raising drive for a permanent uss *Arizona* memorial at Pearl Harbor, is conducting a search for any of the 298 surviving crew members who were attached to that ship when lost on 7 Dec 1941. Such survivors should communicate with: Mr. H. Tucker Gratz, c/o uss *Arizona* Memorial, Pearl Harbor, Hawaii."

For the benefit of those who came in late, *Arizona* was one of a number of U. S. Navy ships sunk at Pearl Harbor by the Japanese attack on 7 Dec 1941. Here's the story:

At 0758, *Arizona*, with the repair ship uss *Vestal* (AR 4) alongside, was hit by an aerial torpedo amidships and seven bombs, one of which (presumably a 1000-pounder) plunged down *Arizona*'s smokestack and exploded. Today, the rusted, twisted hulk of the once proud battleship still remains at her berth—a memorial to the 1102 men who went down with their ship that Sunday morning.—Ed.

It's Back Again — Who Fired That Last Shot?

SIR: I have read, at various times during the past 12 years, several dozen claims as to which ship fired the last shot during World War II. Most of these claims, as I remember them, were for 13 or 14 Aug 1945. I would therefore like to submit the name of *uss Heermann* (DD 532) for that honor.

While on radar picket duty in company with two or three other destroyers (the names of which I've forgotten), *Heermann* and the others were attacked by a lone Kamikaze at approximately 1305 on the afternoon of 15 Aug 1945. All ships opened fire and the plane was splashed about 200 yards astern of *Heermann*. Since all ships present opened and ceased fire within seconds of each other, it would be difficult to single out one of them as having fired last. Still, I'd like to think it was *Heermann*.—D. R. H., HMC, USN.

• Yours isn't the first claim for "last shot" honors to be put forth on behalf of *Heermann*.

Back in June 1946 *ALL HANDS* printed a letter which described the same incident. The official records

agree. They show that on 15 Aug 1945, *Heermann*, as part of Task Force 38, was steaming about 50 miles from the Task Force in company with *uss Black* (DD 666), *Bullard* (DD 660) and *Southerland* (DD 743) when the ships were attacked by a Japanese suicide plane which apparently hadn't gotten the word. All four ships reportedly opened fire at 1317 -9 zone time (0418 Greenwich mean time) and ceased firing at 1319 (0419 G M T).

However, there is a slight technicality involved in all this. *Heermann* and the others fired at the enemy plane after hostilities had officially ended, so there is some question about whether or not their shots could correctly be called the last of the war.

In answering the June '46 letter about *Heermann* we listed the leading contenders for last shot honors as they stood at that time. Surprisingly enough, *uss Pennsylvania* (BB 38) seems to be the only new name brought to light in all the discussions that have been taking place in these pages ever since. So, we added her name to the old list and came up

with the following chronology, based on Greenwich Mean Time, which shows how the various claims stack up against each other today:

0700 13 Aug 1945—*uss Tigrone* (then SS 419) used her deck gun to bombard a radio station and other buildings on Mikomoto Shima in the western entrance to Sagami Wan, Honshu, Japan.

1106 13 Aug 1945—*Pennsylvania* fired at a suicide plane which made a run on American shipping at Okinawa.

1924 13 Aug 1945—*uss Spikefish* (SS 404) torpedoed a Japanese submarine in the East China Sea.

1935 14 Aug 1945—*uss Torsk* (SS 423) torpedoed a Japanese coast defense vessel in the Sea of Japan.

2117 14 Aug 1945—*Torsk* torpedoed a second coast defense vessel in the same area.

2300 14 Aug 1945—Hostilities officially ended.

0417-0419 15 Aug 1945—*Heermann* and the other DDs fired at a suicide plane.

Now, whom did we miss this time? You'll let us know?—ED.

Looking for a Hurricane?

SIR: Being a member of Airborne Early Warning Squadron Four (VW-4) and having participated in flights in support of the Joint Hurricane Warning Center, I find your article, "Watch Out for These Ladies of the Sea" most interesting. It is gratifying to note the accuracy of the subject matter. However, I would like to mention one point which I feel is misleading.

ROUGH GOING—High seas make it rough for *USS Waccamaw* (AO 109) as she fuels *USS Cascade* (AD 16).



The article stated that penetration of the eye was accomplished by "flying roughly parallel to the winds." Entrance to the eye is normally accomplished by holding the wind fairly broad on the port wing or beam and, in exiting, the wind is placed on the starboard wing or beam.

The mission of the Warning Service is extremely important and my participation has provided a deep personal satisfaction in knowing that in some measure due to the efforts of VW-4, many lives have been saved that would otherwise have been lost without provision of adequate storm warnings.—D.A.H., LT, USN.

• Whether you enter the storm with the wind broad on the port wing (the recommended practice) or parallel to the flight course, our editorial hat is off to the Navy Hurricane Hunters. As you indicated, they are instrumental in reducing loss of life and property damage due to storm action.

One further word on technique:

A flight into a hurricane is at best a hazardous and rough trip during which the crew can do little but hang on and give mental support to the pilot. Picking the run-in spot is touchy business for it is the point at which the wind is the reciprocal of the storm's direction of movement. It can be passed up quickly and the plane carried into the severe quadrant of the storm. According to authorities the entrance is usually made in the left front quadrant of the storm. By keeping the wind fairly

broad on the port beam the drift will carry the aircraft through the weakest quadrant (left rear) into the eye of the storm.

Numerous low-level penetrations are made by hurricane hunters in the line of duty. During these flights the altitude can well dip below 500 feet to a point where sea spray carried by hurricane force winds will splash against the plane and turbulence will drive it down toward the waves below.

It is a rough job and VW-4 and all of the other units working with the Joint Hurricane Warning Center deserve much more than these few words of praise.—ED.

Role of the T-CVU

SIR: Reference your article in the October issue of *ALL HANDS*, page 26: "The passing of Badoeng Strait marks the active duty end of the 114 CVEs built during World War II . . ."

Don't write those CVEs off yet. Remember the four designated as E-CVUs: *uss Corregidor* (T-CVU 58), *Tripoli* (T-CVU 64), *Cape Esperance* (T-CVU 88) and *Windham Bay* (T-CVU 92). I believe I can speak for all of them in saying that although we do not now perform the functions of a CVE, that's what we started out as and we definitely are not inactive.

Corregidor for example, steamed about 86,500 miles last fiscal year and that may not be the highest figure among the four.

Incidentally, *Corregidor* now has a

"new look" resulting from installation of two cranes on the flight deck. This eliminates our requirement for crane services in loading and unloading the aircraft we normally carry.—J. T. Lowe, Jr., Capt, usn CO, uss Corregidor.

• We detect the note of pride in your letter for the gallant escort carriers that established amazing combat records in World War II and during the Korean conflict. However, according to the Navy's rolls, there are no active CVEs serving with the Fleet. We did not intentionally overlook the four escorts converted to T-CVU status for duty with the Military Sea Transportation Service. Their work is the type that derives little glamour and even smaller amounts of coverage in military and civilian press, but their importance cannot be denied.

Take Windham Bay for instance. Her trips in the Pacific since mid-June 1957 have carried her to Yokosuka, Japan; Manila, P.I.; Saigon, Vietnam; and Bangkok, Thailand. She steamed a total of 27,596 miles on her appointed rounds. Outbound from the U. S. she carried more than 50,000 measurement tons of cargo including 135 planes. Inter-theater and return voyages added another 28 aircraft included among 18,000 additional tons of cargo.

On the Yokosuka via Pearl Harbor run is Cape Esperance. Since last June she has steamed a total of 44,325 miles and carried some 88,448 measurement tons of cargo. Like her three sisterships assigned to MSTS runs, her principal cargo has been aircraft. During the last half of 1957 she carried 302 planes to and from the United States.

Serving in the Atlantic with Corregidor is Tripoli. Since July she has made three trips to Europe carrying more than 33,000 tons of cargo. More than 100 aircraft were included on her

manifests during this period.

All of the MSTS assigned carriers make about seven trips per year, each one averaging about 45 days and touching at two to three ports. All are 512 feet long and displace 7020 tons (light). They are outfitted to carry more than 300 troop-class passengers and 85 cabin-class under normal conditions. This could of course be increased in times of emergency.

The MSTS carriers really keep busy. Tripoli once steamed 8742 miles during 588 of the month's 720 hours. Another 72 hours were spent loading and unloading cargo and part of the 60 "free hours" were spent fueling. When this claim was made Corregidor immediately came back with a report of steaming 9042.3 miles during one month and spent only 94 hours of the month's 720

in port. Forty-six hours were consumed in loading and offloading and a large part of the remaining 48 was utilized for the purpose of fueling and awaiting favorable tide.

These figures are quoted here as an indication of the schedule these ships operate on and not in an attempt to establish a record for T-CVU type ships.

A quick rundown of Navy records established some interesting facts about the present status of these carriers which are small in size, but large in courage. More than 65 CVE, CVHA, CVHE, CVL and CVU types are still carried in the register. Only five of these are still on active duty, the four MSTS carriers and the assault helicopter aircraft carrier uss Thetis Bay (CVHA 1)—Ed.



SHIP-TO-SHIP mail is dropped to USS Salem (CA 139) at sea while USS Lake Champlain (CVS 39) and a DD are fueled by USS Caloosahatchee (AO 98).

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying The Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D.C., four or more months in advance.

- *uss Arizona* (BB 39)—The second annual reunion will be held on 12 April at the Jack Kennedy Center, Naval Base, Terminal Island, Long Beach, Calif. For further details, write to W. E. Larsen, 4019 West 176th St., Torrance, Calif.

- *Waves* — Waves will celebrate their 16th birthday with a reunion to be held in Detroit, Mich., on 25, 26 and 27 July. For additional information, write to Waves National Reunion Committee, Room 421, Federal Building, Detroit 26, Mich.

- *uss William D. Porter* (DD 579)—A reunion has been scheduled for 15 March at the Biscayne Terrace Hotel, Miami, Fla. Inquiries may be addressed to H. Seward Lewis, 1442 N.W. 7 Court, Miami 36, Fla.

- *107th Naval Construction Battalion* — The fourth annual reunion will be held on Labor Day weekend at the Hotel Governor Clinton, New

York City. For details write to Samuel B. Gross, P.O. Box 732, Westhampton Beach, N. Y.

- *uss Canisteo* (AO 99) — All former crew members who served on board from January 1951 until December 1955 and who are interested in a reunion, with time and place to be decided by mutual consent, may write to Daniel Rizzo, YN1, USN, c/o USNRTC, 52nd St. and 1st Ave., Brooklyn 32, N. Y.

- *uss Marblehead* (CL 12) — All hands who served on board this ship from 1939 to 1942 who are interested in holding a reunion during the summer of 1958 may write to R. L. Lane, EMC, RFD 4, Box 150, Norfolk 6, Va.

- *uss Peiffer* (DE 588) — All who served on board during World War II who are interested in holding a reunion, with time and place to be decided, may write to Charles F. Richardson, 329 Taylor Rd., Knoxville, Tenn.

- *uss South Dakota Veterans' Association of WW I* — The 37th annual reunion of the World War I crew will be held in Portland, Ore., on 12 April. For further information, write to Carl Haggland, 2519 N. E. 59th Ave., Portland 13, Ore.

Portholes AND Eyeports in Subs

SIR: In your August issue you stated that submarines did not have portholes. This is to inform you that subs of the R and of the S class *did* have portholes. Although they were called eyeports, you could still see through them. They couldn't be opened.—J. J. Byrnes, TM1, (SS) USN, and H. A. Hottendorf, TM1 (SS) USN.

SIR: In the August edition you agree with C. E. K. YNC(SS) that the photo

on a submarine of *Salmon*, *Sargo*, or *Seawolf*, class.

I would like to invite you to re-read the story in the April issue of the exploits of *uss Salmon* (SS 182) (I assume everyone has read this story at least once) and note particularly that *Salmon* survived a dangerous situation by sticking to her guns.

May I suggest that hereafter you, too, stick to your guns and guide these young fellows like C. E. K., YNC, back on a straight and proper course such as

to the accuracy of ALL HANDS, as Chief Brown suggested, we are sticking to our guns.

If you read the letter in question, which appeared on page 19 of the August '57 issue of ALL HANDS, you'll see we never said that submarines did not have portholes. We said . . . "As far as the picture goes, (shown above) you've got us there too, even though we didn't come right out and say, 'This photograph was taken in a submarine.'"

So, sticking to our guns, we repeat, we never did state in our August issue that submarines did not have portholes.

In regard to the letter from Byrnes and Hottendorf, technically we must say that "R" and "S" class submarines DID NOT HAVE PORTHOLES. They did, however, have eyeports. It must be remembered that portholes are for light and ventilation and therefore must be capable of being opened and closed. Eyeports, which are usually found on the bridge of all modern submarines, can be seen through, but not opened. You may have noticed there's no need for any ventilation on the bridge of a sub.

Now, back to the picture in question. As you can see, the officer of the deck is looking through a porthole. The Naval Photographic Center tells us that the picture was not taken aboard an ASR or other type surface ship, but the submarine C-2. This number is plainly visible on the back of the steersman's foul weather jacket.

The C-2, strangely enough was originally designated the V-9, and later given the numbers SS 171 and named *uss Cuttlefish*. The V-9, C-2, SS 171 or Cuttlefish, regardless of what you call it, definitely had portholes—see below picture—as most submarines built in the 1920s and 30s did. This particular sub, completed in 1934, was about 275 feet long, and at that time displaced about 1120 tons. Because of the



PHs at Pensacola

ALMOST ANY PLACE you go nowadays you run across a camera enthusiast. However, the naval aerial photo students are among the few who can literally say they are up in the air over their photography.

Students in the Aerial Phase of PH "A" School at the Naval Air Technical Training Unit at Pensacola, Fla., are being taught how to become skyborne shutter bugs. Training covers everything from souping the long negatives to the maintaining of nuts and bolts of their complicated cameras.

Top: Drying of aerial film is explained to PH student. *Top right:* Unusual photo machine is a strip printer. Its operation is part of aerial PH training at Pensacola. *Right:* Students check roll of strip print with their teacher to learn the fine points on which they will be graded. *Lower left:* Instructor briefs student in preparation for a photo training flight. *Lower right:* Strip prints are overlapped and glued to make mosaic map.





Every Navyman's

JOIN THE NAVY and see the world is a recruiting pitch that is as old as the Navy itself. In spite of the jokes to the contrary it still stands good today. Sailors cover more ground than just about any other serviceman and see places and sights that folks back home only dream about.

It is only natural that with such travel opportunities photography should be a popular hobby in the Navy. These two pages of pictures show sailor shutter bugs using the world for their studio. Whether equipped with a simple box-type camera or a fancy high priced job, the Navyman can't miss taking interesting and colorful photographs as he enjoys liberty in foreign ports. His personal photo album can easily become an object that will make the folks back home envious of



ALL HANDS



A Photographer

their traveling man and his photo opportunities.

Top left: Sights of Singapore's Tiger Balm Garden are preserved on film. *Top left center:* Carriermen photograph their ship in harbor at Marseilles, France. *Top right center:* Friends overseas are snapped during Paris liberty. *Top right:* Seeing is believing and sailors with three-eyed tuatara in New Zealand have proof. *Right:* Famous land mark of Pisa has often been photographed by Navymen. *Lower right:* Swiss maids make good subject for Navy shutter bug. *Lower right center:* Philippine fisherman is another subject for a try at contest prize. *Lower left center:* Souvenir for the folks back home is taken by shipmate during tour of Algiers. *Lower left:* Navymen in Japan are surrounded by interesting subjects. *Left:* Roman Colosseum.



HINTS ON WHERE-WHEN-WHAT

MAKE A PICTORIAL RECORD

The "once-in-a-lifetime" experiences of the Navyman with others through picture taking. This perfect key to new friendships and the means to help friends.

FACTS BEFORE

Basically alike, all cameras will take good pictures. Even a box camera is as versatile as its operator. Choose a camera that meets your particular needs and budget. There are advantages and disadvantages to each type of camera. Decide first what you want to do with photography, check below to find out which camera will best do the job, then get the best you can afford.



SHUTTER is compared to your eyelid—except it is always closed and "sees" nothing until the moment of snapping the picture. Set your shutter speed faster to catch moving objects—slower for stationary subjects.

FOCUS is pictures by bringing the lens away from

AT SEA . . . foul weather

Don't wait for perfect weather—life aboard ship goes on. If you do venture out on the deck in foul weather, observe the ship's safety rules. **CLIMB CAREFULLY.** Watch out for slippery decks. Lash the camera to you so that you can have two hands free if necessary. Neck and wrist straps are available. Salt spray can ruin camera and lens. Use temporary cover at plastic bag.

AT SEA . . . fair weather

Don't load in bright sunlight. Use your body as a sunshield. Colored and polaroid filters are a must of sea. Check your film package instruction sheets.

ABOVE DECKS

Make sure masts, rigging, wires, etc., are not crossing your picture too close to the camera. Get depth in your composition by keeping part of your ship in the foreground.

BELOW DECKS

With the last films available, flash is no longer necessary indoors. Don't point your camera at light source. In close quarters, "bounce" your flash off the bulkhead or overhead. Use of handkerchief to cover flash unit will help.

FROM THE AIR

Use as fast a shutter speed as you can. Do not brace camera against part. Hold it against yourself or pillow to absorb vibration. Include portion of wing, engine or tail in your composition. Filter and lens hood are standard. Patterns of city lights are easy with last films.

ASHORE—IN THE COUNTRY OR IN THE CITY

Tell a story—covering your adventures or the activity of hand. (Buildings, carrying, diving, selling, shopping—even waiting and sleeping). Keep shots simple. Close-ups of people, animals, textures of walls, old wood, shapes of trees, houses and folks all are interesting to others if it interests you. If they are strangers—particularly in a foreign country—request permission first. Just because the sun isn't shining, don't put your camera away. Rain can be pictorially exciting, too. Just like your ship, the city and country are busy places from sunrise to lights out and late.

IN THE SUN

Avoid noon sun (or overhead lighting). Mid-morning and mid-afternoon is just about right (45 degree angle). Avoid hard side lighting (late, late afternoon) for color slides. Use white card or aluminum foil as reflector to lighten extreme shadows. Better still, use flash. Don't shoot with the sun in back of your subject. If you must—expose for the part of the subject which will be center of interest. With people, expose for flesh tones.

AT NIGHT

Just because the sun went down, don't pack up your camera. A tripod and shots taken on "T" (time) at "B" (bulb) will do the trick. Don't be afraid to experiment. A cable release will minimize camera movement. Double or triple exposures—on purpose—can be creative fun. Try it on fireworks, traffic movements, harbors and lightning storms. Wet nights are good because shiny surfaces reflect light.

ANIMALS AND PETS

Use reasonable care in selecting your subject because the best helpful hint is to get up close! Feeding usually pleases the subject. Keep background simple—such as sky, bulkhead or piece of cord in the case of smaller creatures. Kiddies and cuties get same treatment.

ACTION—SPORTS, DANCE, WORK

Speed: Understand the action and wait for the peak of the jump, turn or catch.

Background: Watch your subjects move, then maneuver to a position that will give you a clear sky or contrasting background (light subject—dark background). Preset your focus on where the action will take place. Throwing the confusing detail in the back out of focus also helps. Low camera angles are always good.

Composition: Shoot action as it comes toward you rather than broadside which shows blur more readily. "Slewing" or "panoraming" like a gun takes practice. . . don't rely on it. Fill your picture area. Sometimes the best shots of an action or sports event are not in the peak action but in the preparation tension and the aftermath of victory celebration or defeat depression.

BOX AND FIXED FOCUS CAMERAS

Advantages: Inexpensive, foolproof, rugged. Anyone can take good pictures under specific conditions. Uses inexpensive roll film, that is always available. Contact prints are suitable for album use.

Disadvantages: The fixed lens setting, aperture and shutter speed limits its use. Not recommended for fast action shots, technical uses, copying, night photography or closeups.

FOLDING ROLL FILM CAMERA

Advantages: Compact, lightweight, easy to operate. Roll film is inexpensive and available everywhere. Ideal for album contact prints and enlargements. The cost varies depending on type of shutter, lens and rangefinder equipment.

Disadvantages: Folding mechanism and bellows must be handled with care. Lenses not interchangeable.

TWIN LENS REFLEX

Advantages: Quick action, rugged, easy to operate. Closest to ideal camera for average Navyman. Composition is made easy because what you see is what you take and the image is the same size as the negative. Excellent for all light conditions. Good size negative (2 1/2 x 3 1/2) for contact prints. Fine for enlargements. Unusually good selection of all types of film—available and inexpensive. Color slides can be made this size or smaller with use of 35mm adapter. Excellent cameras at all price ranges.

Disadvantages: Lenses usually not interchangeable. Watch parallax and distortion in extreme closeups. Lack of perspective may distort image.

SINGLE LENS REFLEX

Advantages: Compact, lightweight, fast-shooting, easy to handle, high versatility. Has all the advantages of the twin reflex and 35mm cameras and still has no parallax problems—so is ideal for extreme closeups. (Parallax is the difference between what you view and what the lens actually takes when real close to subject.) Lenses are easily interchanged.

Disadvantages: Relatively expensive.

FLASH ATTACHMENTS are available for color film today (yes, even in color!) you will be sure to get the best. Follow film instruction sheets.

NATURAL LIGHTING: Investigate the new superfast films on the market (black and white and color) and experiment with existing light conditions. Fold sheets of aluminum foil in your kit to improvise reflectors.

LIGHTING EQUIPMENT of all purpose, space saving, you'll find yourself with

Use aluminum foil as a handy "reflector."



CAMERA CARE

SALT WATER is rough on cameras. Wipe off salt water spots on lens with lens tissue. A plastic zipper bag is a handy holder until you are ready to shoot. After shooting, check camera thoroughly for spray spots. Wipe off immediately.

REPLACE LENS CAP immediately when camera is not in use. Keep a spare handy.

ACCESSORIES SHOULD FIT exactly. Don't buy adapter rings and flash connections that almost fit. If necessary, order from manufacturer.

STOW CAMERA CAREFULLY—not uncovered where it will pick up dust and lint. Avoid hot pipes.

KEEP LENS AND FILTERS CLEAN with a soft lens brush or antistatic brush. Lens tissues should be kept handy. Don't use eyeglass tissues that contain silicon.

NEVER OIL your shutter.

DON'T FORCE ANY PART of a camera. Take it to a qualified repairman.

LOAD WITH CARE!! Watch out for dust in the workroom and sand at the beach. Make sure film is loaded straight and tight.

SHIPMATE!

Position of subject? Comfortable!



CAMERA HIGH to avoid double chin. to shorten long neck.



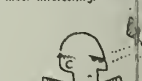
Keep background simple. Avoid objects directly in back of subject that confuse important lines.



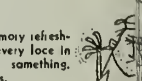
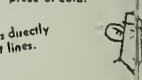
HORIZONS should be horizontal.

GROUP SHOTS are valuable memory refreshers. Try to get even lighting and every face in view. Have small groups doing something. Make a diagram to get proper names.

CENTER OF INTEREST is just above the center of most interesting.



BALD MEN by casting a diffused shadow of cord.



OF YOUR NAVAL CAREER

and his family can be recorded for the future and shared with other, all-age hobby and conversation maker can be the life our memory library of old Navy friends the world over.

THE ACCESSORIES

The lack of "things to adjust" on the box camera eliminates many problems—but its use is more limited under many conditions. The flexibility of more complicated cameras allows you to take pictures almost anywhere. You can adapt the utility of these cameras to more extreme distances and light situations by adjusting the FOCUS, the APERTURE and the SHUTTER SPEED.

sharply defined (imitating you to poster or further the film.

APERTURE is likened to the pupil of the eye. It becomes smaller in very bright light and larger to receive more light when light is dim. You have to vary the size of your lens opening to pass more (or less) light on to the film.

35MM MINIATURE

Advantages: Compact, lightweight, inconspicuous. It is best for fast candid shooting under a wide variety of conditions. Black and white and color film available everywhere and is inexpensive. Lenses are interchangeable for telephoto, wide angle and microscopic closeup work. Perfect for cruise coverage and for lecture projection slides. Easily stowed and coned.

Disadvantages: Large film load (36 or 20 exposures) makes quick development of single shots impractical. Enlargements are necessary even for albums. Watch for camera movement in shooting. Slightest trace of lint, small scratches or fingerprints on lens and film shows in enlargements.

PRESS CAMERA

Advantages: Large negative, pin-point focusing on ground glass. This rugged, all-purpose camera is most commonly used by news photographers. Single shots can be processed immediately. Film packs and roll film adapters are used for quick sequence shooting. Excellent for portraiture, group shots, copying and action. Film available in a great variety of emulsions. Lenses interchangeable. Can be rigged as an enlarger aboard ship. Makes excellent contacts. **Disadvantages:** Conspicuous, bulky, heavy. Film is comparatively expensive.

"PHOTO-IN-A-MINUTE" CAMERA

Advantages: Develops pictures on the spot (1 minute). Fine for rush report and operational work. Subject can be reshot immediately to correct error in exposure or composition. **Disadvantages:** No negative for reprint and darkroom control. Prints must be sent to manufacturer for copies.

STEREO CAMERA

Take your ship in 3D! This fascinating luxury-type photo set-up is based on the same principle as granddad's stereoscopic viewer. These pictures must be viewed and projected with special equipment.

all these cameras. However, with the superfast film available in most light conditions available indoors and out. Use your exposure meter.

WHY? Consider the fact: before burdening separate gear.

FLASH BULBS vs. SPEEDLIGHT. Both are efficient and excellent. Choice depends on work load, storage facilities and budget. **CAUTION:** Aboard ship or in aircraft, high frequency electronic beams may set off flash bulbs. Don't carry bulbs in pocket.

PORTRAITS

Keep subject away from background (especially with flash).

In most compositions left. Eyes are usually

You can subdue highlights with your hand or a

Show only one ear. Keep other in shadow.

Try several expressions.

GOOD TASTE... You may be sorry later if subject is in need of shave, out of uniform, or ribbons and insignia wrong. Check your model. Square that hat. Roll down sleeves.

EXTRA GEAR

CAMERA CASE will give protection from bumps, bangs, scratches and weather.

EXPOSUREMETER: Properly used it measures brightness to insure a correct exposure. This is your most valuable acquisition—after your camera and case.

CABLE RELEASE: An important aid to minimizing camera movement in shooting at low shutter speeds. Hold it loosely and unkninked.

TRIPOD: Don't hand-hold shots at slower speeds than one twenty-fifth of a second. For perfect steadiness of camera during exposure, a tripod is the answer. Pick out a sturdy, lightweight one. Rubber tips are more useful than spike tips.

FILTERS: A yellow filter is recommended for fast work outdoors in the sun for black and white film. At sea filters protect lens from salt spray and flying particles. Orange, red and green filters give dramatic special effects on water, clouds, ship's gear and portraits. Check instruction sheet with filter for exposure allowances.

LENS HOOD: Prevents light flare caused from light entering lens from side angles.

CLOSEUP LENSES: For extreme closeups, portraits and copy work, additional lenses and attachments are worthwhile.

PUTTING YOUR PICTURES TO WORK

AS A RECORD TO SHOW OTHERS—ALBUMS

Plan your album so that it not only includes the past but grows with the years. Don't think of it as one book—but as a system which will best suit your needs for the future. It's not too late to start here are some suggestions



PLAN I STRAIGHT CHRONOLOGICAL ALBUMS

Insert pictures as you take them. Label albums by year.

PLAN II CLASSIFIED SUBJECTS ALBUMS

Keep your pictures together in several general groups. For example, keep a separate book for "Family History"; a book for each member of the family, each Navy hitch or cruise, each ship or station. Special occasions such as crossing-the-line parties, birthday parties, vacation trips, family reunions, church or club activities, all make lively presentations.



PLAN III FAVORITE PHOTO DISPLAY ALBUMS

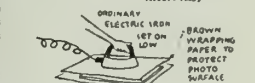
Make enlargements or carefully cropped contact prints of your best shots to make a pleasing and impressive exhibit of your favorite subjects.



MOUNT PHOTOS with dry mounting tissue for the neatest and most permanent job. You can use an ordinary flat iron or electric iron for this. Hinging small prints at the top with a piece of masking tape is another excellent method—especially if you want to keep data on the back of photo. Water mixed paste buckles prints and rubber cement deteriorates in time. Paper corners do the job, but pictures are too easily banowed.



FILE YOUR NEGATIVES CAREFULLY in a paper envelope or transparent negative preserver to protect them from dust, scratches and fingerprints. Mount a contact print on each envelope as an aid to identifying negative, checking density and quality. Arrange by date or subject. Be sure to mark caption data for future reference.



CRUISE BOOKS AND SHIPS' PAPERS

Your cruise book committee will welcome informal snapshots in good taste that were overlooked by the ship's photographer.

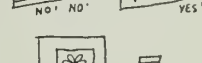
PUBLICITY AND PUBLIC RELATIONS

Enter the Annual All-Navy and Inter-Service Photographic Contest and many other contests that are open to all. Navy subjects are among the most colorful. Public interest is always keen for picture stories of Navy life and travel. Newspapers and magazines are always interested in usable material. (ALL HANDS Magazine is certainly interested.) Check with your security officer for clearance. Be sure to pack pictures with care. Do not roll or fold. Don't write on back. Attach caption with cellulose tape so it can be removed. Glossy prints, 8 x 10, are best for publication.



PHOTOS—THE PERFECT GIFT

Send home a snapshot with each letter. A picture can give the folks at home a chance to share your experiences. A photo of your ship is an ideal Christmas or birthday gift to a shipmate. Even your worst shot can be an aid to remembering someone, somewhere—some day. Greeting cards can be photographically custom-tailored to your cruise, special occasion or thought. Saves you money, too.



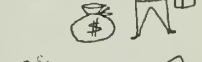
SHIP AND HOME DECORATIONS

Even ordinary shots can be made dramatic when blown up to larger sizes and framed or mounted. It is not necessary to frame them under glass. Mount your print with dry mounting tissue flush with the edge on pressed wood, well board or heavy card. Spray it with plastic spray to preserve it or coat it with butcher's wax and polish it for that satin finish. Unlimited possibilities for your ship's library, EM club or den at home. Sepia prints lend themselves to oil coloring better than black and white.



COPY WORK FOR BULLETIN BOARD

Before you copy anything—check for copyright and reproduction regulations. See your Security Officer for Navy regulations and federal laws.



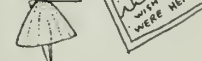
SLIDE SHOW AND LECTURE MATERIAL

Your trips overseas can be shared with family and friends, clubs and church groups for many years to come through a lively selection of colored slides. Don't forget to keep a record or diary of dates, places, and experiences.

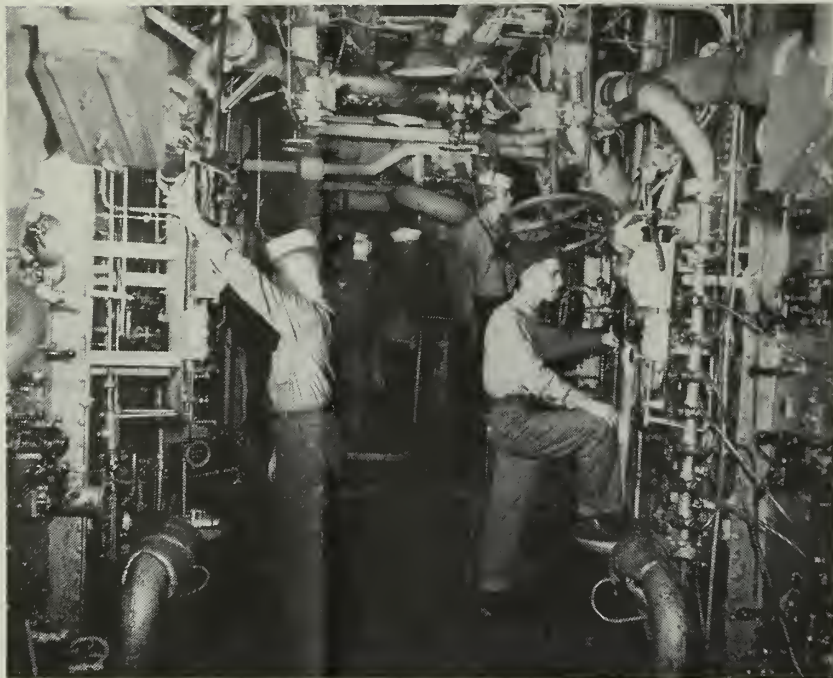


GOODWILL AMBASSADOR

If you do take pictures of new friends overseas, jot down their addresses and send them, or their relatives in the U. S., a print as a pleasant surprise. You'll be very welcome next time you pass that way. **WARNING:** Before taking pictures of "natives," check local customs on picture taking taboos of religious ceremonies, festivals and veiled women. Get permission first.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



PIPE THIS—A member of the deck gang might be confused by this maze of pipes, dials and valves but not the fireroom gang of USS Essex (CVA 9).

Nuclear Power School

The cornerstone of a new Nuclear Power School was laid during the closing days of 1957 at the U. S. Submarine Base, New London, Conn. RADM Hyman G. Rickover, USN, Assistant Chief of the Bureau of Ships for Nuclear Propulsion, who is credited with being the father of nuclear submarines, guided the stone into place.

This building, which will be completed in June, will be the Navy's first permanent Nuclear Power School. Nuclear power courses have been offered at the submarine base since 1956 and more than 400 officers and enlisted men have graduated.

Costing a million dollars, the new structure will house 62 rooms, including classrooms, laboratories, offices and an auditorium. When completed the building will be known as Cromwell Hall. It takes its name from one of the submarine force's greatest heroes of World War II, CAPT John P. Cromwell, USN, who rather than hazard the possibility of revealing a complex opera-

tion to the enemy, went down with his submarine.

Speaking earlier at the Submarine Base, ADM Rickover termed the atomic submarine "an underwater satellite moving rapidly through the vast oceans—almost as hard to detect and destroy as a satellite orbiting the earth's atmosphere."

Citing the need for well trained men in every field of science, particularly atomic power, he explained, "To build and man a nuclear Navy demands a higher order of administrative and technical competence, as well as new concepts in matters of personnel, of tactics and of strategy."

'Private Eye' Checks Guns

An electronic "private eye" that investigates the accuracy of an interceptor's guns without firing them, and does it in flight in minutes instead of hours, is under development for the Bureau of Aeronautics.

Although the tester was designed for a specific armament control system, it can be adapted for most aircraft with all-weather capability.

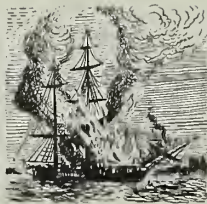
The test equipment weighs less than 15 pounds and is built into the plane as an integral part of its electronic gun-aiming system. The unit reduces the time required for a complete check of the system from a matter of several hours to less than three minutes. In addition to being faster, testing now can be done more often, under better conditions on board ship, and by less highly-trained personnel.

The six-step checkout process involves feeding artificial signals into the system under test to simulate combat conditions. The test equipment gives a realistic problem to the gun-aiming system so that the pilot or technician can tell if different components are working properly by interpreting the signals that appear in the cockpit.

The pre-flight test unit also allows a pilot to practice "dry runs" without leaving the flight deck. Either practice or testing can be done during periods of Fleet blackout without fear of detection, for the radar does not release any energy into space during these closed-circuit periods.

Use of the test equipment is not limited to grounded aircraft. A pilot can perform the same tests while flying to his target, if he has to be-

YESTERDAY'S NAVY



On 5 Feb 1942 the National Naval Medical Center at Bethesda, Md., was established. On 9 Feb 1943 organized Japanese resistance on Guadalcanal ended. On 14 Feb 1813 USS Essex rounded Cape Horn, becoming the first U. S. warship to do so. On 16 Feb 1804 LT Stephen Decatur burned the frigate Philadelphia in the harbor at Tripoli after pirates had captured her. On 17 Feb 1864 the Confederate submarine Hunley blew up and sank USS Housatonic off Charleston, S. C. On 22 Feb 1909 the Great White Fleet returned to Hampton Roads, Va., after its famous cruise around the world.

come airborne in an emergency, without the pre-flight check of radar and computer equipment. This will eliminate the possibility of flying into combat with the plane's armament control system needing adjustment.

The new device also allows the returning pilot to determine if repairs are needed before he lands, thereby reducing "turn-around" time needed to get the aircraft back into combat.

Increased employment of aircraft is cited as another advantage of the new development. The faster, more frequent tests will reduce the number of planes grounded for adjustment of the control system and thus will increase the number of combat-ready interceptors.

Relatively inexperienced men can check the control equipment by turning several dials according to simple instructions. Maintenance men no longer will have to move portable test equipment across crowded flight and hangar decks to the side of each aircraft to perform these checks.

42 E's Out of 60

The Gladiators of Attack Squadron 106 have returned to NAS Cecil Field, Florida, after a five-week deployment at Guantanamo Bay, Cuba. They brought home with them 42 coveted Navy E's.

During their deployment VA-106 flew its *Cougars* on 841 sorties while compiling 679.6 flight hours. To accomplish this feat the squadron maintenance department and line crews maintained 97.6 per cent availability—an outstanding record for a squadron of F9F-8s.

During the 33-day period the Gladiators expended 3442 practice bombs while performing three types of special weapons deliveries. This training period was climaxed by a series of competitive exercises during which VA-106 pilots earned 42 E's out of a possible 60. Every pilot in the squadron succeeded in bringing home at least one E, while six of them won three each.

A Plank and a Piece of Cake

The crew of the heavy cruiser *USS Des Moines* (CA 134) has celebrated the ship's ninth anniversary of commissioning by cutting a huge birthday cake and passing out nine Plank Owner Certificates.

Since her commissioning 15 Nov 1948, *Des Moines* has had eight tours of duty with the Sixth Fleet.



PALM-FRAMED *USS Ranger* (CVA 61) is admired by Dominican children.

Ranger Hits First Liberty Port during Shakedown

USS Ranger (CVA 61) has returned home after conducting an eight-week shakedown cruise in the Caribbean and visiting her first foreign port, Ciudad Trujillo, capital of the Dominican Republic.

The 60,000-ton carrier, described as one of America's most potent weapons for peace, saluted the Dominican capital with the customary 21-guns when she steamed into the port for a two-day visit.

Immediately the international visiting began with liberty parties streaming ashore and hundreds of Dominicans coming aboard for a closer look at the massive aircraft carrier. The American sailors who went ashore had an opportunity to visit the oldest existing Spanish settlement in the new world. Rebuilt after the disastrous hurricane of 1930, the city's broad avenues and modern buildings contrast

sharply with the older section which contains excellent examples of a Spanish colonial town of the 16th Century.

The *Ranger* softball squad played local teams and a reception, given by the Dominican government, honored the ship.

The more than 3000 visitors aboard *Ranger* saw the newest weapons, equipment and carrier in the United States Navy. Many were awed by the tremendous size of the flight deck (252-feet wide, 1046-feet long) which is capable of handling atomic bombers and supersonic fighters.

The ship, newest in the line of *Forrestal*-class carriers, will journey to the Pacific early next summer and make Alameda her home port. The months before she steams into the Pacific will be spent in training operations.

FULL dressed *Ranger* awaits visit from top Dominican Republic officials.





LANDLOCKED SAILORS of NAS Hutchinson, Kans. enjoy visit to state fair and (rt) shoot pool in servicemen's center.

Aloha, Hutchinson

NAS Hutchinson, Kans., is on its way out of the Navy. Located in the heart of the mid-west prairies, some 600 miles away from any sizable body of water, the famed naval activity will be disestablished on 1 Jul 1958.

For the past 15 years the sea surrounding the air station has been the waving crops of wheat in the fields. Its only contacts with ships were with those of the plains—giant combines harvesting the grain.

This prairie air station began life as a primary training base covering 2656 acres of land. By 1944 more than 2500 cadets had completed the first stage of their aviation training there. During World War II more than 4000 enlisted personnel, students and officers were stationed at the Naval Air Station.

At the end of World War II the station was deactivated, but in June 1952 the increasing tempo of the Korean conflict caused the reopening of Hutchinson. This time it became a part of the Naval Air Advanced Training Command and the throb of giant multi-engined patrol planes echoed through hangars where years earlier the snarl of the famed N2S "Yellow Peril" trainer had been a familiar sound.

Four-engine PB4Y *Privateers* were the first to arrive for the new training mission, but within months they had been replaced by P2Vs and S2Fs. At present Training Units 604 and 614 operate more than 100 of these aircraft.

The community which gave the Naval Air Station its name grew to be as much a "Navy Town" as Nor-

folk, San Diego or a host of other coast communities that could be named.

Liberty opportunities in the city are many. Each fall the Kansas State Fair rolls into town. A service club is a popular place for Navymen on liberty and the prairie state farmers have taken the Navy people into their homes.

A relatively small city, Hutchinson recognized the housing problem and the local Real Estate Board extended a helping hand to men trying to find homes for their families. Cooperation in every phase of daily life between the civilian community and the Navy has marked the relationship found there.

The primary reason for selecting Hutchinson for disestablishment over other naval air facilities is that con-

tinued operations there for more than two or three years would require an estimated \$35,000,000 expenditure for major rehabilitation and new construction on the station. The disestablishment of the station command will make available urgently needed aviation operating funds during fiscal year 1959.

The land and the station facilities will be disposed of as directed by current surplus disposal policies, but that will not be the end of the Navy in Hutchinson. The Kansas town has learned a great deal about the Navy and has a far different understanding of it than the town people had in the '30s when the only Navy they saw was "Battleship Row" in the newsreels.

Hutchinson, its residents say, will always be a "Navy town."

HIGH IN THE SKY over seas of Kansas wheat fly P2V *Neptunes* of Adv Trng Unit 614 of NAS Hutchinson. NAS is scheduled for disestablishment in July.



Striking Force Exercises

A series of Striking Force exercises is being conducted in the Eastern Pacific by the First Fleet. The first in this series started in early December when some 37 ships and 14,000 men sortied from San Diego and Long Beach.

These Striking Forces differ from major Pacific Fleet training exercises only in their lesser magnitude and duration.

In this particular "Strikex," joint operations from the carrier *uss Hornet* (CVA 12) featured air operations while *uss Helena* (CA 75), armed with the *Regulus I* missile, held guided missile operations. Submarine and antisubmarine warfare tactics were employed with the carrier *uss Philippine Sea* (CVS 47) acting as the major unit of an anti-submarine group.

No More Rhine River Duty

The famed Rhine River Patrol, which the Navy has operated since early 1949, is being returned to the operational control of the Army. The turnover will be completed by 1 Jul 1958. In the transition, the Navy will train personnel of the German Army who will man the patrol craft.

About 350 U. S. Navymen and approximately 50 craft have been patrolling the American Sector of the Rhine River International Waterway, from Lauterburg to Lorch, Germany, a distance of 120 miles, for the past nine years. The primary mission of the patrol is to support the U. S. Seventh Army.

Landing craft of the patrol can transport 280mm artillery cannons and the *Honest John* rocket launcher. The Patrol's collateral tasks include the control of barge traffic and the protection of bridges along the waterway. The patrol, while under the Navy's command, has aided in river rescue work for civil and military groups and also helped evacuate areas of Holland during the disastrous floods in February 1953.

Transonic Fighter Trainer

Two contracts have been awarded for additional F9F-8T *Cougar* fighter trainers and WF-2 *Tracer* early warning aircraft.

The F9F-8T *Cougar*, now in service with the Navy, is a two-place transonic fighter trainer. It has been important in qualifying pilots for carrier operation and supersonic flight, as well as being ready for service as an operational fighter.

The WF-2 *Tracer* houses in its



USS SOLEY (DD 707) recently returned from a four months' tour with the Sixth Fleet which included a visit to Abadan, Iran, world's largest oil refinery.

mushroom-like radome, electronic detection equipment to provide the Fleet with information on impending attack by enemy air and sea forces. The carrier-based, all-weather aircraft can also control friendly task force defense fighters in the interception of such attacks.

Escort Squadron Down Under

Three San Diego-based escort vessels assigned to Escort Squadron Nine have completed a six-day visit to Brisbane, Australia.

The ships were *uss Lewis* (DE 535), the squadron flagship; *Ulvort M. Moore* (DE 442), and *Wiseman* (DE 667).

A number of competitive sports activities, sight-seeing tours and social events were arranged for the

visiting U.S. Navymen by their Australian hosts.

The destroyermen were given free bus transportation by the Lord Mayor of Brisbane and free rail transportation by the Governor of Queensland. A special dance was held in their honor and they were admitted free to the Koala (Native Bear) Sanctuary and Zoo, as well as to movie theatres in Brisbane.

Baseball and basketball games were played with local teams and U.S. bluejackets also entered a state amateur boxing tournament. Some of the visiting sailors even tried the British game of cricket.

In an effort to repay Brisbane's hospitality, the U.S. Navymen held open house for the citizens of the host city. Everyone had a good time.



NEW EYES FOR AMPHIBS—When day or night visibility is zero a new light-weight radar aboard amphibious control craft will help land assault troops.

Gunny Returns to U.S. Marines

The rank of Gunnery Sergeant has been ordered from retirement by the Commandant of the Marine Corps as the result of a recommendation by the 1957 Staff Noncommissioned Officers Symposium.

It is being reestablished in an effort to strengthen the command structure of the Marine Corps. Recently the historic and honored ranks of Sergeant Major and First Sergeant were also reactivated.

The rank of Gunnery Sergeant had a long and colorful career before it was retired in December 1946. It was originally established by an Act of Congress on 4 May 1898. From that time until 1935 the rank of Gunnery Sergeant was in the second pay grade or equal to the present day rank of technical sergeant. This is the primary reason for the widespread habit of addressing technical sergeants today as "Gunny."

In 1935 Master Gunnery Sergeant was added to the rank structure. This



MODERN HUNTER — USS Bittern (MHC 43) is the first of the wooden hull coastal mine hunter class.

rank was also abolished in the sweeping revisions of the enlisted rank structure adopted by the Marine Corps in 1946.

TEW Line for Marines

A new long-range search and height-finding radar system which promises to extend radically the nation's defense perimeters is under development for the Marine Corps.

This highly portable Tactical Early Warning (TEW) system is capable of being moved about by helicopters and is adaptable to rapidly changing tactical situations in any environment.

It's about one quarter the size and weight of conventional systems, yet is capable of detecting enemy aircraft or missiles at altitudes and distances in excess of any existing or contemplated tactical system.

By incorporating detection and height determination into one system, the new lightweight package is capable of replacing two present systems. In addition to being transported by helicopter, the TEW system can be easily and quickly moved about by amphibious vehicles, trucks and cargo-type aircraft.

Construction to Start on Navy-Marine Memorial Stadium

The Navy-Marine Corps Memorial Stadium plans moved forward several big steps at the end of the year. Contributions passed over one million dollars. Then, as a result of Navy participation in the Cotton Bowl, another \$100,000 was put into the fund. This, together with the one million dollars saved up through the years by the Naval Academy Athletic Association, leaves about \$1,000,000 to be raised by July 1959.

And that isn't all. During the Cotton Bowl period (Navy won over Rice Institute 20 to 7, in case

you haven't heard), RADM W. R. Smedberg, III, usn, Superintendent of the Naval Academy, had a luncheon meeting with a group of Texas bankers. The luncheon was a success—the Texans agreed to a loan of up to \$500,000 at a moderate rate of interest if additional money is needed to meet contract requirements for the stadium. Admiral Smedberg announced that the bankers, as their contribution, had waived the usual \$10,000 fee required to confirm such a prospective loan.

Bids are now out and contracts

will be let by 1 March. The contract will be for the entire stadium as planned.

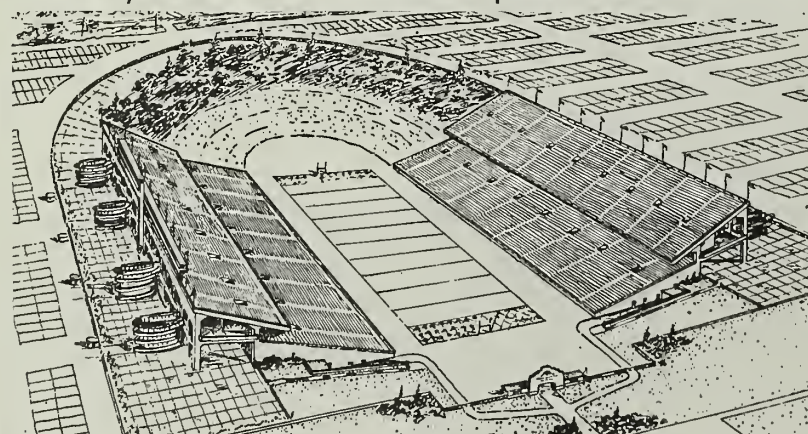
The Sixth and Seventh Fleets have been offered Memorial Gates to represent all type commands overseas. Gates will be reserved until 15 Apr 1958. All funds raised in these two Fleets since 2 Dec 1957 will count toward the \$15,000 needed for a gate.

Naval Districts and Marine shore activities are now getting into full swing in their drives for the fund. Movie premieres are being planned in various cities; many stations are planning spring carnivals, and several unique money raising ideas are being used.

Memorial chairs may be dedicated to anyone who has ever served in the Navy or Marine Corps, living or dead, Reserve or Regular. Some servicemen are helping spark the drive by getting the word to former Marines and Navymen through newspapers, radio, TV—and word of mouth.

The plans for naming the chairs which seem to be most popular are: (1) Name of the individual for whom a ship is named; (2) Name of a shipmate lost in action or an operational casualty; and (3) Name of the individual contributing.

GOAL NEARER—Navy-Marine Corps Memorial Stadium plans got big boost at year's end when contributions passed one million dollars.





Coast Guard Seamanship

IN THE COAST GUARD as well as the Navy, small boats play an important part in the safety of the ship and crew. In addition, Coast Guardsmen patrolling offshore or in our harbors must be ready to lower away these small craft on a moment's notice to answer a cry for help. Boat drills such as these held aboard the Coast Guard training ship *USCGC Unimak* (WAVP 379) operating out of Cape May, N. J., keep all hands shipshape in small-boat handling.

Top: Coast Guard trainees hold lifelines waiting for the command that will lower them to the sea. *Below:* 'Lower away' and the boat crew is on its way. *Lower right:* Boat #2 hits the water with a splash. *Above right:* Messenger line is heaved to small boat as it pulls alongside the cutter.





HOOPING IT UP — It's time again when Navy hoopsters steal the sport's picture while shooting for the rim on ship or station hoping for All-Navy honors.

All-Navy Photo Winners

Our nuclear navymen are tops no matter how you judge them. In the recent All-Navy Photo Contest, John J. Krawczyk, FTCA, usN, one of the few remaining original crew members aboard our first atomic submarine, was awarded first prize in the black and white Novice (Amateur) single picture class.

The prize winning entry submitted by the *Nautilus* chief—"Fiesta Bound"—was taken near Cuernavaca, Mexico. It pictured a group of Mexicans walking to a fiesta on the other side of the mountains which were beautifully shown in the background of the picture. According to Chief Krawczyk, small groups

of Mexicans walk anywhere from 60 to 70 miles to go to one of these fiestas. While "Fiesta Bound," they carry with them all the provisions they need for the two-three day journey.

In addition to winning first prize, Krawczyk also received three honorable mentions. He submitted a total of 12 entries to the All-Navy Contest.

The nuclear submariner was also awarded second prize in the Seventh Inter-Service Photo Contest where the winning entries in the Navy contest were matched against the best pictures of the Army, Air Force, Marine Corps and Coast Guard.

Krawczyk's winning picture in the

Inter-Service Contest had received an honorable mention in the All-Navy judging. Entitled "Four Feet in Error," it was an action shot of a bronco named "Lightning," that was more than living up to his name during a rodeo in Phoenix, Ariz.

The finals for the All-Navy Photo Contest were held at the Museum of Modern Art in New York City. The judging was done by a board of eminent professionals consisting of: CAPT Edward Steichen, usNR (Ret.), Chairman and Director, Department of Photography, Museum of Modern Art; Mr. Jacob Deschin, Photography Editor, *New York Times*; Mr. Ed. Hannigan, Editor, *U. S. Camera* magazine; and Mr. Ray Mackland, Picture Editor, *Life* magazine.

Here are the winners in each class and category of the All-Navy Photo Contest:

BLACK AND WHITE — NOVICE

First "Fiesta Bound"

John J. Krawczyk, FTCA (SS), usN
uss *Nautilus*, SS(N) 571

Second "Legends of the Great Buddha"

LTJG Robert I. Gomel, usNR

NAAS Pt. Isabel, Texas

Third "Bridge to Eternity"

LT Holmes S. Norville, usNR

Staff, Com12

Honorable Mention

"Return of the Fishing Boats"

LTJG Robert I. Gomel, usNR

"Sea Foam"

T. "J" Gabris, SCLK, uscc

Staff, Third Coast Guard District,
N. Y., N. Y.

"Pourquois Pas"

John J. Krawczyk, FTCA (SS), usN

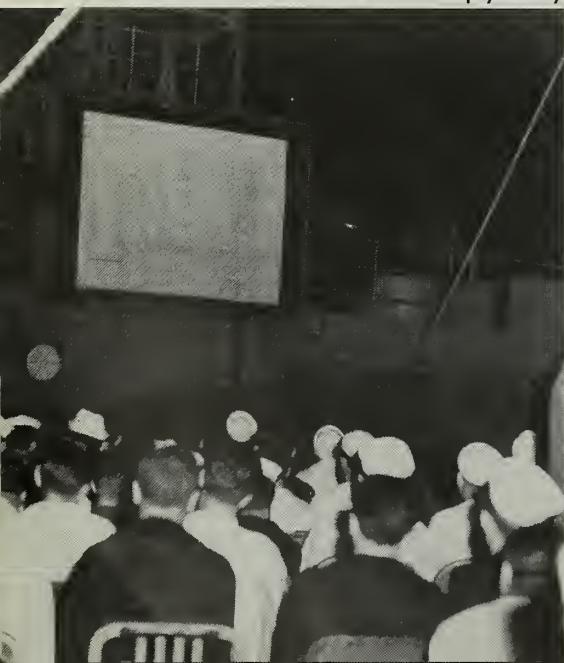
"Which Way Is Up"

John J. Krawczyk, FTCA (SS), usN

"Four Feet In Error"

John J. Krawczyk, FTCA (SS), usN

TIME FOR FUN — Movies are enjoyed by white hats and (right) a very good time is had during open house.



**35 mm COLOR TRANSPARENCIES —
NOVICE**

First "Birth of an Ambition"

John M. Anglin, PNC, (SS) USN
U. S. Navy Recruiting Station,
Dallas, Texas

Second "Candle Light"

CAPT Edward Fredericks, USN
CO, NATTC, NAS Memphis, Tenn.

Third "Hong Kong Night"

LT John J. Berend, USN
USN Postgraduate School,
Monterey, Calif.

Honorable Mention

"Spider at Dinner"

CDR Jack L. Kenner, USN
BuPers, Washington, D. C.

"Cross of Ages"

CAPT Edward Fredericks, USN

"Natural Duck Blind"

LT Ronald G. Granger, USN
NavSta Kodiak, Alaska

"Dusk on the Mountain"

LTJG Robert H. Aslakson, USN
NAS Moffet Field, Calif.

"Hometown, USA"

Walter T. Bregler, AN, USN
NAS, Willow Grove, Pa.

BLACK AND WHITE — EXPERIENCED

First "November"

CDR Edward C. Scully, USN
Comptroller Division, BuPers

Second "Moonlight on the Weser"

Gordon C. Sahnaw Jr., CT3, USN
NSGAA, Navy 913

Third "Over the Numbers"

Robert J. Costello, PH1, USN
NRTU, NAS Memphis, Tenn.

Honorable Mention

"On the Bank of the Canal"

CDR Edward C. Scully, USN
"Lonesome"

Leroy R. Newburn, PH3, USCG

USCG, US Custom House, N.Y., N.Y.

"Hawaiian Hat"

CDR Edward C. Scully, USN

**BLACK AND WHITE PICTURE
STORY — EXPERIENCED**

First "Halloween Ball"

Leroy R. Newburn, PH3, USCG

Second "Canal Clipper Cruise"

CDR Edward G. Scully, USN

**35 mm COLOR TRANSPARENCIES —
EXPERIENCED**

First "Waimea Falls"

CDR Edward C. Scully, USN

Second "Sea Green"

CDR Edward C. Scully, USN

Third "Blumen"

Eugene Kirby, CT1, USN
NSGA, Navy 913

Honorable Mention

"Aloha"

CDR Edward C. Scully, USN

"Standing Room Only"

CDR Edward C. Scully, USN

There were no winners in black and white story division, in the novice class.

SIDELINE STRATEGY

CONSERVATION minded Navy-men at NAS Lakehurst, N. J. can be mighty proud of their weekend accomplishments during the past three years. Some 40 members of the Lakehurst Conservation Club—which was founded as a means of extending the existing recreational facilities at the LTA base—have more than blistered fingers and caloused hands to show for their 1500-man hours spent at work in the field.

Before the club was organized in September 1954, the sandy soil at the gigantic airstrip base didn't provide enough vegetation to feed

ated, by, of all people, the station's chaplain.

Although the club members have devoted a lot of sweat and toil to their project, they do not claim all the credit. Its success has not been the guesswork of amateurs. Technical guidance and material assistance have been received from many civilian and government activities, including the U. S. Wildlife Service, the New Jersey State Fish and Game Commission and Rutgers University.

To make their project complete, much to the satisfaction of Lakehurst fishing enthusiasts, two small fish ponds were



more than one deer for every 40 acres. There was only one known covey of quail in the whole 7300 acres and upland game and migratory water fowl were rarely seen.

Today it's a different story. Through restocking a small number of breeder bobwhites, the single covey has multiplied eightfold; a mere 115 acres of food plot have brought about a concentration of more than 200 deer; squirrels, rabbits and other wildlife now abound, and waterfowl have found a new breeding-feeding haven.

Club members have given freely their off-duty time, energy, ability and even personal finances to make their conservation program a success. Not a single penny of the more than \$5500 spent to date has come out of appropriated funds. The only government material used was the services of heavy equipment, such as a bulldozer, which was oper-

dug out and stocked with bass and bluegills.

★ ★ ★

Meanwhile, out Pearl Harbor way, the sports minded submariners are singing an old familiar tune, "Who Could Ask For Anything More?" They boast of having one of the island's finest recreation boats, which is rigged for deep-sea fishing; the recently renovated Millican Field is now rated as one of the Navy's most beautiful stadiums; the enlisted men's tennis courts have taken on a new look with their recently added windbreakers and resurfaced decks; a newly re-soiled and resceded Gabrunas Field will soon meet the satisfaction of the many station personnel who participate in intramural softball and touch football; a second swimming pool is under construction; and another fishing boat is in the buildingways. Wow! SubPac, here we come.—HGB, JOC.

SERVICESCOPE

Brief news items about other branches of the armed services.

★ ★ ★

FUNDS FOR THE CONSTRUCTION of four launching sites for the *Bomarc* missile, a long range surface-to-air interceptor weapon, have been released by the Air Force.

The sites will include launching and storage facilities, missile operating and maintenance equipment, control and protection facilities and supporting utilities. They will be located at McGuire Air Force Base, N. J.; Otis Air Force Base, Mass.; Suffolk County Air Force Base, Long Island, N. Y., and Dow Air Force Base in Maine.

The *Bomarc* missile is to be integrated into the Air Defense System of the United States. Successfully tested at Patrick Air Force Base, the supersonic weapon can seek out and destroy enemy aircraft at great distances from its launching site.

★ ★ ★

A UNIQUE RESEARCH AIRPLANE, designated the "Vertiplane," designed to take off and land vertically, hover and fly forward, has been designed and built for the Army under the technical direction of the Office of Naval Research.

Unlike the "tail-sitter" type of VTOL aircraft, such as the Vertijet, the Vertiplane is a "level-lift" airplane. On the ground, it assumes a nose-high attitude because of its extended landing gear. In all phases of flight, including take-off, landing and both vertical and horizontal flight, the plane operates in the conventional, horizontal attitude.

Conventional in appearance, the Vertiplane is a true VTOL aircraft, taking off and landing without any ground run. It employs the "deflected slipstream" principle. It has two large propellers, powered by a gas turbine engine located within the fuselage, and double retractable wing flaps which extend far below the wing trailing edge. When extended, these flaps bend the propeller slipstream downward, providing vertical lift for take-off, hovering and landing. For transition into horizontal flight, the flaps are retracted as the plane picks up speed and the slipstream then flows horizontally.

The Vertiplane has been developed in response to a



SIGNAL CORPS' new all-weather radar 'eye' is able to spot one man half a mile away in darkness or fog.

need by the Army for a medium-speed liaison, reconnaissance or utility plane which can operate from rough terrain without runways. Using its propeller-wing combination for lift in vertical take-off and vertical descent and its wing for lift in horizontal flight, the Vertiplane possesses the advantages of the helicopter yet will far exceed rotary-wing aircraft in speed and range capability.

The Vertiplane is flown with conventional stick and rudder pedals. In addition to the usual flight controls, special provisions have been made to insure adequate control during hovering flight. In landing, the pilot makes an approach with power on and some flap deflection. Then, he extends the flaps and adds power until touchdown is made at zero forward speed. Drag from the flaps helps to accomplish a smooth landing transition at almost constant altitude.

An unusual feature of the Vertiplane is the end plates at both extremities of the wing. These provide structural support for the large flaps and confine the propeller slipstream to the flap span for better flight efficiency.

The Vertiplane is 27 feet, 8 inches long; 10 feet, 8 inches high and has a wing span of 23 feet, 5 inches. The plane is designed to accommodate two people and to have a gross weight of approximately 2600 pounds.

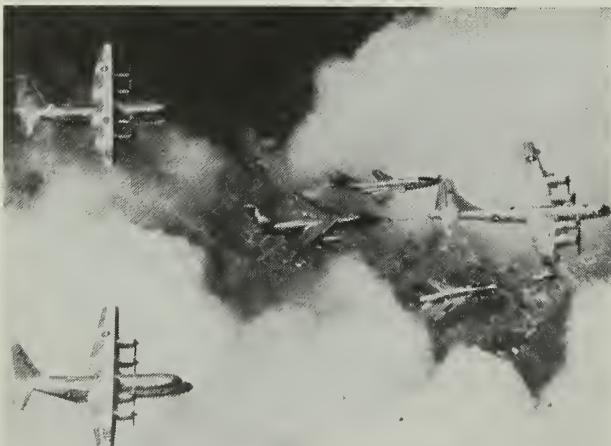
★ ★ ★

AERIAL DELIVERY of nuclear weapons from low altitudes, once a precise and critical task, is now a standard operation for Air Force fighter-bomber pilots.

The technique is made feasible by a combination of an automatic flight control system with a LABS (Low Altitude Bombing System) computer.

Before linking the automatic flight control system to the LABS computer, a pilot man-handled his airplane through an Immelmann maneuver that tossed the bomb, righted the plane from its upside-down position at the top of the loop and ducked away from the bomb blast.

With the new system, a timer button is pressed several seconds before the aircraft begins the Immelmann turn and the auto-pilot unit controls the flight of the plane. When the timer phase is completed, the plane begins its turn, holding a pre-determined heading



A REAL GASSER—Family portrait of TAC's composite strike force has tanker, fighter, bomber, supply aircraft.

and turn. The LABS computer releases the bomb at the proper instant, and the automatic pilot continues to fly the plane through the Immelmann turn, righting it and sending it away from the bomb blast.

Pilots who have flown practice missions with the new equipment have found the automatic pilot to be superior to the manual method.

LABS was based upon the belief that a plane flying at a very low altitude would be able to escape detection before reaching its target. Then the plane could release its bomb while making an upward loop, lobbing it far enough to allow the pilot to escape the blast area.

With a low-angle release, the bomb is lobbed ahead of the plane, which can then fly away from the target area. For a high-angle release, the plane starts its turn over the target and releases the bomb near the peak of its upward turn. While the bomb is traveling upward, the plane passes under it and is out of danger by the time the bomb loops down on the target. This method is termed the "over-the-shoulder" delivery, while the low-angle release is called the "lofting" or "lobbing" technique.

★ ★ ★

A PORTABLE NEUTRALIZING SHOWER STALL, with a water tank heated by highway flares, is now in quantity production for the Army. It will be used primarily at tactical guided missile sites by personnel who are accidentally contaminated with liquid rocket propellants.

Mounted on skids, the unit has a 100-gallon water tank, pressurized by compressed air, or nitrogen, from standard gas shipping cylinders. Since most of its construction is of aluminum, it weighs only 570 pounds. It is three feet wide, four-and-a-half feet long and seven-and-a-half feet high. When not in use it can be folded.

The water tank of the unit is so well insulated that just four truck flares or highway torches will keep the water at body temperature when outdoor temperature sinks as low as 25 degrees below zero. To protect the user from being scalded by overheated water, the tank has a drain plug that melts out and cuts off the water when the temperature reaches 135 degrees. Normally, however, the water is kept from overheating by regulating the number of torches burning. If torches cannot be used, the water can be heated electrically.

The unit was developed at the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va.

★ ★ ★

A NEW PITOT-STATIC TUBE, for more accurate measurement of supersonic aircraft speeds, has been developed for the Air Force. It can be used effectively at speeds up to Mach 3—three times the speed of sound—(at sea level one Mach equals 762 miles per hour).

Mounted on a plane's nose or wing-tip, the tube transmits air pressure data to flight instruments on the pilot's instrument panel and air data computers. This information indicates airspeed, Mach number, altitude and rate-of-climb.

Before the new tube was developed, aircraft were equipped with pitot tubes which lagged in transmitting information at supersonic speeds. The new tube, longer and narrower than the present ones, and with a knife-



LIFT ME TENDER—Army's H-34 helicopter demonstrates its unlimited versatility as an L-19 is gently hoisted aloft.

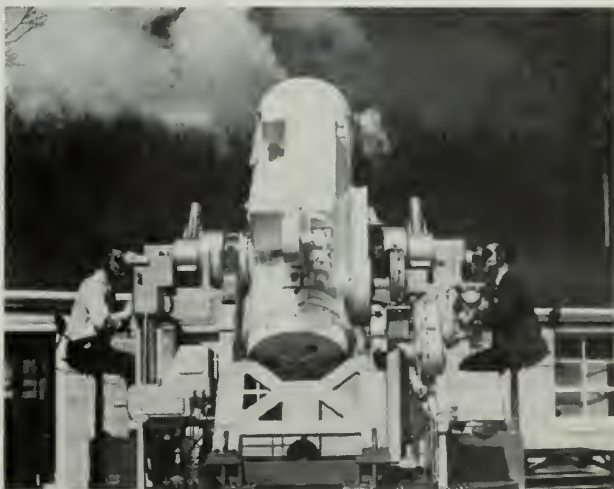
edge opening instead of a blunt-edged one, has a larger static chamber and larger lead-out lines to reduce this lag.

The device is vibration-resistant, and able to withstand extreme variations of temperature. To provide the proper heat under icing conditions, it is equipped with an electric heater which regulates itself automatically.

★ ★ ★

A MISSILE MASTER SCHOOL is being set up at Orlando, Fla., to train the soldiers who will man the Army Air Defense Command's system of firepower coordination for guided missile batteries. The new school replaces a temporary one which was started in October at Ft. Meade, Md., to train the nucleus of a Missile Master team for service in the Washington, D. C.-Baltimore, Md., area.

A complete, semiautomatic system, the Missile Master is being installed in key defense areas as rapidly as equipment and trained operators become available. It is used to coordinate all Army antiaircraft weapons, including the *Nike-Ajax*, *Nike-Hercules* and *Hawk* missiles.



PEEP SHOW—Air Force's recording optical tracking instrument takes pictures of ballistic missiles in early flight.

THE BULLETIN BOARD

You've Got a Lot to Like in Norfolk — This Is Reason Why

HAD DUTY IN NORFOLK YET? If not, you probably will. Plenty of Navymen pull a tour of Norfolk duty. Some say it's because of their sins; others claim such an assignment is the reward for a long life of virtue.

No matter what your viewpoint, you'll find more Navy people living in and around Norfolk than any other place in the world—including the Pentagon and Main Navy.

This very fact makes it different from any other place you've ever been stationed. It means that the whole city of Norfolk is actually one huge naval station. Everywhere you go, you'll find Navymen and their families—on the buses, in the schools, stores, offices and churches. Here—at the crossroads of the Navy—you're more likely to meet former shipmates than any other place, including Times Square.

In The Norfolk Area

That garden spot of the Western Hemisphere generally known to the Fleet as "Norfolk" is really Hampton Roads, an area of the James River and Chesapeake Bay which includes Norfolk, Portsmouth, Newport News, Hampton, Warwick and South Norfolk, Va. If you are assigned to the "Norfolk area" for sea or shore duty, you will be serving in one of these areas. Nearby activities are located in Little Creek, Yorktown, Dam Neck, Oceana, Northwest, and Driver, Va., among others.

Naval Shipyard

No matter how you refer to it, "Norfolk" is quite a spot. Here's a brief description of its activities. It may help you find your way around:

The first drydock in the Western Hemisphere was constructed at the Norfolk Naval Shipyard, Portsmouth, in 1826. Built of Massachusetts granite, the dock narrowly escaped being dynamited in 1862 and is still used every day, although six more drydocks and two shipbuilding ways have been added. The yard is at present valued at more than \$185,000,000. This includes the ship ways,



"Find out if he ever heard of semaphore"

docks, 44 miles of railroad track, nine locomotives, 254 railroad cars, and 394 cranes and derricks. Stores and equipment would add an estimated \$200,000,000 to the yard's value. Within sight of the shipyard is the Portsmouth Naval Hospital, the nation's oldest military hospital. Opened in 1830, the original high pillared building, with many additions, is still in use. It is equipped to care for 2150 military personnel and their dependents at one time, and affords every type of modern medical care.

Naval Base

In comparison with the historic Portsmouth activities, the Naval Base on the Norfolk side of the Elizabeth River is relatively new. Commissioned as recently as 1917, it now has eight sub-commands in the Seawall Point Area.

The Fifth Naval District has its headquarters here at the Naval Base, which is the major activity, the focal point, of the district.

From its original 474 acres the base expanded to more than 4000 acres, largely by land reclamation. Naval engineers, in deepening the ship channels and berths, took land from the sea and swamp.

Storage and administration buildings and 8000-foot criss-cross runways now stand on man-made land. The Naval Base piers are capable of handling the largest ships in the

world. This is the home of the U. S. Atlantic Fleet, and if the whole Fleet had to come in here, the deep water harbor could contain it all.

Naval Supply Center

Handy to the Naval Base piers is the U. S. Naval Supply Center, the largest single supply activity in the Western Hemisphere. Here are stored enough materials to keep the U. S. Atlantic Fleet equipped and supplied for months ahead of its immediate needs.

The Supply Center requires 85 buildings, one of which is said to be the largest building south of the Pentagon. Here can be found everything from paper clips to 20-ton ship's anchors. At present, the yearly issue to the Fleet in the Atlantic, Caribbean and Mediterranean is valued at about 200 million dollars, exceeding even the largest mail order houses.

The Center, including several annexes away from the Naval Base proper, covers nearly 4000 acres of land. It has more than half a billion dollars worth of material requiring millions of square feet of storage space. Several separate depots are used for ship supply, aviation supply, ordnance, special weapons, etc.

Naval Station

On the Naval Base is located the Naval Station, where approximately 100,000 sailors are processed annually as they go to sea or return to shore duty. As these men await their ships or transportation to shore billets, they must be housed and fed. The Naval Station keeps eight barracks in operation and a mess hall with four units where thousands of men can eat at mealtime.

Another component of the Norfolk Naval Station is the Naval Schools Command. Nine schools make up this command, with a student population of more than two thousand. An average of 860 men graduate monthly, trained and ready to assume technical shipboard duties.

Naval Air Station

Next to the U. S. Naval Base is

the U. S. Naval Air Station, home of the U. S. Atlantic Fleet air force and cradle of naval aviation.

The U. S. Naval Air Station was commissioned in 1918 and has since developed a cluster of auxiliary fields to become the greatest naval aviation establishment in the world. Its squadrons of jets, bombers, transports, patrol and torpedo planes, operating with the Fleet, represent an effective arm of defense, particularly in antisubmarine warfare.

The Overhaul and Repair Department does over one hundred million dollars worth of instrument, engine and airframe repair work annually.

The operations control tower clears a monthly average of 13,000 planes for take-offs and landings from one field alone, approximately one landing or take-off every three minutes.

Recently expanded from an auxiliary status is the Oceana Naval Air Station, now a master jet base, located at Oceana, near Virginia Beach, Va. It is considered home for the Navy jet squadrons when they are not operating from carriers in the Fleet.

NATO and SACLant

Not only is there a concentration of U. S. Navy flag commands in the area (there are 23 of them), but here also is the headquarters of SACLant, the North Atlantic Treaty Organization's seagoing command.

Many foreign ships also put in here for training under the Mutual Defense Assistance Program.

The large Amphibious Fleet Training Command is located at Little Creek, eight miles from the Naval Base.

Among other important installations in the Norfolk area are the Mine Warfare School and Mine Depot at Yorktown, Va.

Living in Norfolk

So much for the naval aspect of Norfolk. Perhaps you'll be stationed at one of the installations described above. If so, this is what you can expect to find:

If you're single, you won't like the dating situation. It's pretty difficult to meet girls here for the simple reason that there just aren't enough to go around. To Norfolk's civilian population, add some 20,000 or more sailors, and the men just automatically outnumber the women by a big majority—and this is one situ-

ation in which the minority rules. Even so, some Navymen do meet Norfolk girls, and many Norfolk girls become Navy brides.

Dependents Information Center—If you're married, you or your wife should, by all means, stop in at the Center, located in Building E-24, just inside Gate 2 (which is the main gate) of the Naval Base. It should be the first stop for all married Navymen and their dependents. Its services include housing information, the issuance of dependents' ID cards, maps, notary public service, and general orientation.

Climate—The climate of Norfolk is relatively mild in winter. Snow may fall two or three times during a winter, but it seldom lasts more than a few hours.

In summer, the temperature climbs into the 90s all too frequently, but usually ocean breezes in the evening make it bearable. The humidity makes it pretty rough at

times. Let's face it—it gets hot and sticky in the summer.

All in all, Norfolk's climate is similar to such cities as San Diego, Buenos Aires, Montevideo, Sydney and Rome.

Churches—There are some 371 churches in the Norfolk-Portsmouth area. In almost every one, numerous Navy families are counted as active members.

These churches are listed on the second page of the yellow section in the Norfolk telephone directory. Find the church of your choice near where you'll be located, and you can count on being welcomed. Those church socials and chicken dinners are just like the ones back in your home town.

Schools—Schools in the Norfolk area, like those in almost every section of the country, are still crowded. Between five and 10 per cent of the class rooms here have "split shifts" so that all can be accommodated.

WHAT'S IN A NAME

FASRon on Ice

For the benefit of all hands, FASRon 107, based ashore at Keflavik, Iceland, would like to clarify what is, and what isn't, in its name. From their North Atlantic perch they offer these observations:

The addresses on mail sent to them are a cause of concern, not to mention confusion, in the transport of their mail.

For example, they are not a ship designated as USS Fasron 107. Nor are they accustomed to having aircraft operate in their immediate chow area as might be the case if they happened to be called a Naval Air Facility. But correspondence addressed to personnel in the unit calls them both a ship and a station, as well as other choice titles.

The record shows that they are quick in the support of their squadron whether it be in the field of logistics or blood donations. However, they do not feel that the name Fast Attack Squadron 107 is applicable.

What's more, one might think being in Iceland is special, but that doesn't mean the "S" in their name stands for Special.

These, says FASRon 107, are just a few of the many types of names they find in their mail.

Their title really is Fleet Aircraft Service Squadron 107, and this particular outfit can be reached c/o Fleet Post Office, New York, N. Y.

What is a FASRon?—it's a unit which



maintains and repairs fleet aircraft. A more detailed explanation is this one:

"A mobile unit of the naval operating forces, composed of a nucleus augmented by additional units of personnel necessary to carry out the mission assigned by the force commander; a FASRon is the coordinating agency in the logistic support of fleet aircraft units, except in matters of berthing, messing, and housekeeping; it performs all specialized shop work as distinguished from routine maintenance, and may operate its own aircraft necessary for support of the fleet."

However, school officials are taking big steps to meet the growing demand. In the period from 1950-60, Norfolk City alone will have spent 25 million dollars on new schools.

Not only are Norfolk educators working hard to provide enough buildings; they are also striving to maintain teaching standards as high as possible. Schools here are regionally and nationally accredited.

One very important reason why the schools here are of such high caliber is the large number of Navy wives who teach in Norfolk schools. As a matter of fact, it simply wouldn't be possible to fill all the teaching billets if it weren't for the Navy wives. School administrators are enthusiastic about having them on their staffs, too. They point out that the Navy wives—coming as they do from such broad sections of the country—bring to the classrooms a much broader view. So your Navy wife with teaching experience will find a hearty welcome here if she wishes to continue her profession.

If you are interested in working in some college credits during your tour of duty here, you should plan to visit the Norfolk Division of the College of William and Mary. This school offers a two-year college course in a wide variety of subjects.

To obtain more detailed information about schools in the Norfolk area, write to one of the following:

Supt. of Norfolk Schools
Bank and Charlotte
Phone MADison 5-7491

Supt. of Norfolk County Schools
148 Granby Street
Phone MADison 5-5301

Supt. of South Norfolk Schools
3815 Bainbridge Blvd.
Phone KImball 5-1511

Supt. of Portsmouth Schools
Municipal Annex
Portsmouth, Va.
Phone EXport 7-0721

Supt. of Princess Anne Schools
Princess Anne Court House
Princess Anne, Va.
Phone PRincess Anne 411

Catholic Schools
Catholic Information Center
608 McKevitt Bldg.
Norfolk 10, Va.
Phone MADison 2-4480

Transportation—There are six railroads, three air lines and two bus lines offering passenger service to and from the Norfolk area.

The main highways leading in and out of Norfolk are:

U. S. 58—Enters from Portsmouth via ferry.

U. S. 460-A—Enters from Portsmouth via tunnel.

U. S. 60 — Enters via Newport News-Norfolk Tunnel (replacing the old ferry route.)

State Highway 168 — Enters via Newport News-Norfolk Tunnel (replacing the old ferry route.)

U. S. 13—Across Chesapeake Bay by Kiptopeke-Little Creek ferry, entering at Little Creek Naval Amphibious Base, later forming a part of Military Bypass around the city.

State Highway 170 — Through South Norfolk, connecting with U. S. 460 in Campostella section.

U. S. 460—Merges with U. S. 58 at Suffolk, later with U. S. 13 bypass.

U. S. 17—Enters from Portsmouth on north. Major north-south highway.

Housing—There is an ample supply of housing in the Norfolk area—whether you want to buy or rent.

Builders in the past few years have spent literally millions of dollars in constructing apartment projects and individual homes in and around Norfolk. There has been a tremendous growth in the suburbs to the east and south—toward the Municipal Airport, Little Creek and Virginia Beach.

Real estate prices here are about on a par with other metropolitan areas. They're possibly a little higher than, say, Kansas City or St. Louis, but lower than in Chicago, New York

and especially Washington, D. C.

Whether you buy or rent, a member of the Norfolk-Portsmouth Real Estate Board can give you reliable advice.

Two agencies keep listings which may be of help in finding a home:

The Housing Office, Fifth Naval District,
Norfolk, Va. Phone MADison 2-8211,
Extension 3285

Travelers Aid Society, 714 Boush St.,
Norfolk, Va. Phone MADison 7-5635

Recreation — Servicemen's Clubs.
The Servicemen's Club is located at 219 Boush Street, diagonally across from the Navy YMCA. It's a popular gathering point and base of operations for Norfolk Navymen. Sponsored on a nonprofit basis by the city's leading citizens, the Club offers a bar lounge and liquor lockers. On Tuesday and Friday evenings orchestras are furnished for dances.

Clothes lockers, dressing rooms and showers are available on a 24-hour basis. The minimum membership fee is \$1.50 per month.

A complete calendar of weekly social activities at downtown Y's, USO clubs and the City Recreation Center is published weekly by the Fifth Naval District Special Services.

• **Bowling**—There are six bowling centers in Norfolk with a total of more than 100 alleys. They're located at 257 Boush Street; 2208 Colonial Avenue; 5034 Chesapeake Boulevard; 157 W. Ocean View Avenue; 7659 Granby Street; and 9th and Granby Streets.

• **Wrestling**—One of the most popular of indoor sports in Norfolk is big-time wrestling. Matches are held each Thursday night at 8:30 in the Norfolk Auditorium located at 9th and Granby. The auditorium seats 3669, and they pack 'em in.

• **Baseball**—You Navymen who like baseball will enjoy watching the Norfolk Tars play at Myers Field, 20th and Church Streets. The Tars, backed by the New York Yankees, play in the Class B Piedmont League, along with Portsmouth, York (Pa.), Hagerstown (Md.), Colonial Heights (Petersburg), Newport News, Lynchburg, and Lancaster (Pa.). The Tars have been champs for about five successive years. The Big Leagues are loaded with ex-Tars.

• **Fishing**—Chesapeake Bay is



popular for Ocean View spots, salmon, trout, croakers, flounder and many other varieties of fish. You can rent boats at Lynnhaven Inlet and Ocean View.

Surf fishing from the shore, pier and bridge fishing and fresh water fishing at Lake Smith are popular pursuits here, too.

• **Golf**—You can play golf the year 'round at several good 18-hole courses:

Ocean View Course, in Ocean View off Granby Street (not far from Breezy Point Gate of NAS). Semi-private.

Kempsville Meadows Golf and Country Club, 9 miles from Norfolk. (Also semi-private.)

Stumpy Lake Course. Municipally operated.

Sewells Point Club, operated by the Navy, next to Camp Allen.

Naval Base Course (9 holes), operated by the Naval Station, between Dillingham Blvd., and the sea wall.

• **Beaches**—While you're stationed in the Norfolk area, you'll be near one of the best ocean beaches in the country—Virginia Beach. The beach has five miles of clean, white sand and a 2½-mile concrete boardwalk. In addition to the ocean, the resort offers dances, an amusement center, golf courses and picnic areas.

There's another excellent beach on Chesapeake Bay at Ocean View. This resort also has picnic areas and a large amusement park.

Seashore State Park, operated by the State of Virginia, has a long stretch of beach and large picnic areas with shelters.

Cottages may be rented by the week at reasonable rates, but they are so popular that reservations are usually made several months in advance.

• **Movies and the Stage**—Besides the many movie houses on naval stations, there are scores of them all over town—and surrounding suburbs.

There are two legitimate stage groups in Norfolk—the Norfolk Little Theater and the Theater Guild. Both groups are anxious to have naval personnel for both on- and off-stage work.

If you have musical talent, you may want to join the Norfolk Symphony Orchestra or chorus.

There's Norfolk, have a good tour.



"Why put a ship in mothballs? Moths can't eat metal!"

Latest List of Movies Ready for Distribution To Ships and Bases Overseas

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in December.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

Fire Down Below (954) (C) (WS): Drama; Rita Hayworth, Robert Mitchum.

Quantz (955) (C) (WS): Western; Fred MacMurray, Dorothy Malone.

The Disembodied (956): Horror; Paul Burke, Allison Hayes.

X-Unknown (957): Mystery; Dean Jagger, Edward Chapman.

Loving You (958) (C): Musical; Elvis Presley, Lizabeth Scott.

House of Numbers (959) (WS): Drama; Jack Palance, Harold J. Stone.

Let's Be Happy (960) (C) (WS): Musical; Vera Ellen, Tony Martin.

Death in Small Doses (961): Drama; Peter Graves, Mala Powers.

Shiralee (962): Drama; Peter Finch, Elizabeth Sellers.

The Brothers Rico (963): Drama; Richard Conte, Dianne Foster.

Sea Wife (964) (C) (WS):

Drama; Joan Collins, Richard Burton.

Forty Guns (965) (WS): Drama; Barbara Stanwyck, Barry Sullivan.

Outlaw's Son (966): Western; Dane Clark, Ben Cooper.

Portland Expose (967): Drama; Edward Binns, Virginia Gregg.

Operation Madball (968): Comedy; Jack Lemmon, Kathryn Grant.

The Living Idol (969) (C) (WS): Drama; Steve Forrest, Liliane Montevecchi.

Black Patch (970): Drama; Geo. Montgomery, Dianne Brewster.

Bop Girl Goes Calypso (971): Musical; Judy Tyler, Bobby Troup.

Johnny Trouble (972): Drama; Ethel Barrymore, Cecil Kellaway.

The Devil's Hairpin (973) (C): Drama; Cornel Wilde, Jean Wallace.

Three Faces of Eve (974) (WS): Drama; David Wayne, Joanne Woodward.

The Weapon (975): Drama; Steve Cochran, Lizabeth Scott.

Trooper Hook (976): Adventure; Joel McCrea, Barbara Stanwyck.

Story of Esther Costello (977): Drama; Joan Crawford, Rossano Brazzi.

Hear Me Good (978): Comedy; Hal March, Merry Anders.

WO Appointments Issued for First Class POs and Chiefs

Eleven first class and 62 chief petty officers have been issued temporary appointments to Warrant Officer, W-1.

These appointments are from an eligibility list established by the 5 Feb 1957 selection board.

Regular Navy appointments were broken down into the following designators: Aviation Operations Technician (7112), one; Boatswain (7132), 12; Surface Ordnance Technician (7232), nine; Ordnance Control Technician (7242), one; Aviation Maintenance Technician (7412), one; Machinist (7432), four; Electrician (7542), one; Aviation Electronic Technician (7612), 12; Electronics Technician (7662), seven; Ship Repair Technician (7742), one; Ship's Clerk (7822), four; Supply Clerk (7982), seven; Medical Service Warrant (8172), three; Photographer (8312), three; Civil Engineer Corps (8492), five; Communication Technician (7642), one; Aerographer (8212), one.

TABLE I
NUMBER WHO PASSED AND ADVANCEMENT QUOTAS FOR
EACH RATE AS RESULT OF AUGUST 1957 EXAMINATIONS

RATING	No. who passed	No. who may advance	No. who passed	No. who may advance	No. who passed	No. who may advance
	Ta E-4		Ta E-5		To E-6	
BM	2226	89	1353	40	1464	44
QM	287	287	158	158	90	90
SM	316	316	199	199	87	87
RD	617	617	561	561	172	172
SO	251	251	316	316	149	149
TM	194	194	216	216	159	18
GM	1420	260	988	135	709	21
GS	27	27	43	43	29	29
FT	—	—	617	400	229	46
FTG	5	2	—	—	—	—
FTM	233	118	—	—	—	—
FTU	6	3	—	—	—	—
FTA	302	153	—	—	—	—
FTL	35	35	—	—	—	—
FTE	17	10	—	—	—	—
MN	127	4	119	12	51	2
ET	515	515	680	680	253	253
IM	38	14	33	5	13	3
OM	18	18	18	18	9	3
TE	—	—	—	—	—	—
TE(RM)	62	62	257	257	120	120
TE(YN)	35	26	91	55	40	14
RM	735	735	607	607	186	186
CT	380	380	333	333	130	130
YN	1702	1275	1162	700	578	200
PN	1573	787	647	647	152	114
MA	165	165	75	55	78	15
SK	1163	1163	684	684	270	180
DK	310	243	196	196	91	29
CS	1269	410	994	70	1057	52
SH	1234	300	708	200	109	31
JO	115	115	40	40	10	10
LI	168	32	82	8	31	2
DM	126	126	55	55	18	18
MU	142	142	132	132	40	40
MM	1465	1465	1244	1244	408	408
EN	1471	1105	893	600	665	55
MR	247	247	296	296	62	62
BT	1076	1076	969	969	254	254
EM	975	975	1071	1071	319	319
IC	292	292	306	306	98	98
ME	361	361	327	200	275	36
FP	498	350	299	230	156	156
DC	504	370	305	100	264	10
PM	31	31	22	22	3	3
ML	35	8	23	9	12	2
SV	80	10	25	25	6	6
CE	88	88	75	75	25	25
CD	499	150	209	105	143	42
CM	275	100	105	52	69	8
BU	247	200	171	130	51	51
SW	64	64	66	33	36	8
UT	74	74	60	60	28	28
AD	1868	1834	1106	564	1472	44
AT	549	549	822	822	154	154
AO	—	—	411	205	328	10
AOT	54	21	—	—	—	—
AOU	746	374	—	—	—	—
AQ	102	102	20	20	10	10
GF	46	46	7	7	12	6
AC	290	290	246	246	73	73
AB	—	—	460	180	136	68

This Will Give You the

HERE ARE THREE TABLES which give you a rundown of the number of advancements authorized as a result of the August '57 examinations and the prospects for advancement as a result of the February 1958 service-wide examinations.

Table I contains the actual numbers of personnel by rating and pay grade who passed the examinations held in August 1957, and the number who were included in the quota for advancement to each rate on a service-wide basis.

Tables II and III contain estimates of the anticipated results of the February 1958 examinations. These estimates are based on available statistics, study of past performances, and a considered estimate of all the variables which might affect the number of personnel who may be included in the advancement quota. The information contained in Tables II and III is subject to change. However, it is accurate

Boilerman Course Revised, Radio Course Discontinued

One new Enlisted Correspondence Course is now available to all enlisted personnel and another has been discontinued.

The new course, *Boilerman 2*, (NavPers 91512-2), is a revised edition divided into six assignments as NavPers 91512-2. While the course is for USN and USNR personnel, it will be of special benefit to Naval Reservists who may take it for repeat Reserve credit and pick up 18 retirement points at the same time.

The course that has been discontinued is *Introduction to Radio Equipment* (NavPers 91406-C).

Augmentation Selection Board Names Reserves for Promotion

The names of 180 Naval Reserve and temporary officers recommended for permanent appointment in the Regular Navy by the Augmentation Continuing Selection Board have been announced.

Of the selectees, 143 are line officers with four of these in the Restricted Line. Thirty-seven are in the Staff Corps.

Those to receive appointments, providing they meet all administra-

Odds on Advancement

enough to give prospective candidates for advancement a good idea of their opportunities and the degree of competition expected.

If you take a close look at Table III you will notice that the opportunities for advancement as a result of the February exams are excellent. There is, however, a slight decrease in the over-all number of advancements that will be authorized in comparison to past advancements.

In addition to the regular February and August exams, two additional exams are given in May and November for selected pay grade E-4 personnel in order to provide additional petty officers in the ratings where they are most needed. It is anticipated that all candidates passing the May 1958 exams will be advanced to pay grade E-4.

Check the following tables and estimate your own chances. This should give you an added incentive to prepare for these examinations.

tive requirements, include: Line, 47; Line (Women), 10; Aviation Line, 82; Special Duty Law, four; Supply Corps, 13; Supply Corps (Women), one; Chaplain Corps, six; Civil Engineer Corps, four; Medical Service Corps, three; Nurse Corps, 10.

New Bluejackets' Manual Is Now Available

The new, completely revised fifteenth edition of the *Bluejackets' Manual* is now available.

More than a revision, this training handbook and recruit's guide has been restyled and rewritten.

The fifteenth edition has been compiled principally by and under the direction of CAPT John V. Noel, USN, assistant chief of Naval Personnel for special projects, assisted by LT Donald A. Franz, USN, of the Bureau's Training Division, and Chief Journalist William J. Miller, USN, of the Bureau's Enlisted Personnel Division. The project was accomplished by them on an independent, off-duty basis.

The revised edition is now available at Navy Exchanges, ship's stores or directly from the U. S. Naval Institute at Annapolis, Md.

TABLE I Cont.

ESTIMATES ON NUMBERS WHO WILL PARTICIPATE AND NUMBERS WHO WILL PASS FEBRUARY 1958 EXAMINATIONS

RATING	No. who passed		No. who may advance		No. who passed		No. who may advance	
	To E-4		To E-5		To E-6		To E-6	
ABG	371	20	—	—	—	—	—	—
ABU	969	70	—	—	—	—	—	—
AE	580	580	493	493	102	102	102	102
AM	939	939	695	695	302	302	302	302
PR	196	196	65	65	59	59	59	59
AG	204	204	177	177	68	68	68	68
TD	119	119	123	123	45	18	45	18
AK	860	110	332	200	122	90	122	90
PH	—	—	192	192	122	92	122	92
PHA	112	60	—	—	—	—	—	—
PHG	412	210	—	—	—	—	—	—
HM	2904	1600	1295	500	1001	40	1001	40
DT	453	100	399	150	96	22	96	22
SD	1294	40	893	26	660	20	660	20
TOTALS	36,297	23,313	25,585	17,070	13,959	4,833	13,959	4,833

TABLE II

ESTIMATES ON NUMBERS WHO WILL PARTICIPATE AND NUMBERS WHO WILL PASS FEBRUARY 1958 EXAMINATIONS

RATING	To Pay Grade E-4		To Pay Grade E-5		To Pay Grade E-6		To Pay Grade E-7	
	Toke Exam	Will Pass	Toke Exam	Will Pass	Toke Exam	Will Pass	Toke Exam	Will Pass
BM	3575	2225	2810	1355	3285	1465	3250	1055
QM	450	95	345	160	220	90	790	280
SM	495	315	410	200	190	85	330	130
RD	980	615	1245	560	445	170	325	130
SO	385	250	660	315	400	150	265	85
TM	330	195	380	215	435	160	670	270
GM	2200	1420	1830	990	1715	710	1805	705
GS	40	25	75	45	65	30	70	25
NW	No prediction in view of this being a newly established rating							
FT	—	—	1200	615	570	230	825	345
FTA	480	300	—	—	—	—	—	—
FTE	25	15	—	—	—	—	—	—
FTG	10	5	—	—	—	—	—	—
FTL	55	35	—	—	—	—	—	—
FTM	360	235	—	—	—	—	—	—
FTU	10	5	—	—	—	—	—	—
MN	180	125	245	120	125	50	95	35
ET	—	—	1355	680	690	255	1140	465
ETN	345	210	—	—	—	—	—	—
ETR	415	250	—	—	—	—	—	—
ETS	85	50	—	—	—	—	—	—
IM	60	40	65	35	30	15	40	15
OM	30	20	45	20	20	10	40	15
TE(RM)	100	60	455	255	240	120	190	45
TE(YN)	55	35	175	90	95	40	80	20
RM	1215	735	1250	605	525	185	795	305
CT	500	380	590	335	400	130	325	180
YN	2670	1700	2295	1160	1245	580	1320	465
PN	2500	1575	1330	895	415	150	410	140
MA	235	165	135	75	170	80	140	50
SK	1785	1165	1365	685	680	270	950	370
DK	500	343	440	195	215	90	295	90
CS	1965	1270	2135	995	2665	1055	2380	835
SH	2005	1210	1355	710	245	110	760	280
JO	200	115	85	40	25	10	30	10
LI	245	170	150	80	85	30	75	25

TABLE II Cont.

ESTIMATES ON NUMBERS WHO WILL PARTICIPATE AND
NUMBERS WHO WILL PASS FEBRUARY 1958 EXAMINATIONS

RATING	Ta Pay Grade E-4		To Pay Grade E-5		Ta Pay Grade E-6		Ta Pay Grade E-7	
	Take Exam	Will Pass	Take Exam	Will Pass	Take Exam	Will Pass	Take Exam	Will Pass
DM	200	125	105	50	45	20	35	15
MU	210	140	245	130	90	50	105	40
MM	2400	1340	2425	1245	975	410	1325	550
EN	2420	1470	1775	895	1455	665	2205	805
MR	445	245	505	295	140	60	150	60
BT	1925	1075	1948	969	595	255	830	275
BR	—	—	—	—	50	30	50	30
EM	1670	975	2105	1070	820	320	905	345
IC	470	290	695	305	245	95	120	50
ME	635	360	720	325	590	275	875	315
FP	895	495	615	300	355	155	390	140
DC	785	505	615	305	560	255	720	260
PM	45	30	45	20	10	5	10	5
ML	60	35	55	25	30	10	30	10
SV	125	80	55	25	15	5	10	5
CE	140	90	160	75	65	25	50	15
CD	590	500	430	210	325	145	160	70
CM	440	275	215	105	155	70	120	45
BU	430	245	340	170	125	50	105	40
SW	105	65	130	65	70	35	55	15
UT	130	75	120	60	65	30	35	10
AD	—	—	2270	1105	2890	1470	4250	1410
ADJ	1380	785	—	—	—	—	—	—
ADR	2025	1080	—	—	—	—	—	—
AT	—	—	1595	820	525	155	1020	260
ATN	210	285	—	—	—	—	—	—
ATR	395	250	—	—	—	—	—	—
ATS	25	15	—	—	—	—	—	—
AO	—	—	900	410	730	330	950	375
AOU	1230	735	—	—	—	—	—	—
AOT	90	55	—	—	—	—	—	—
AQ	—	—	35	20	20	10	240	110
AQB	50	30	—	—	—	—	—	—
AQF	105	70	—	—	—	—	—	—
GF	85	45	15	5	30	10	150	55
AC	—	—	370	175	160	75	230	100
ACR	45	30	10	5	—	—	—	—
ACW	145	115	145	60	—	—	—	—
ACT	240	150	10	5	—	—	—	—
AB	—	—	1005	460	475	135	340	120
ABG	550	370	—	—	—	—	—	—
ABU	1445	970	—	—	—	—	—	—
AE	—	—	1000	495	310	100	480	190
AEI	185	120	—	—	—	—	—	—
AEM	905	460	—	—	—	—	—	—
AM	—	—	1495	695	670	300	1280	430
AMH	635	335	—	—	—	—	—	—
AMS	1070	605	—	—	—	—	—	—
PR	—	—	145	65	155	60	255	70
PRM	240	155	No Prediction		—	—	—	—
PRS	75	45	No Prediction		—	—	—	—
AG	375	205	365	178	135	70	160	65
TD	—	—	305	125	135	45	155	60
TDR	90	55	—	—	—	—	—	—
TDI	100	65	—	—	—	—	—	—
AK	1315	860	705	330	290	130	310	115
PH	—	—	425	190	270	120	305	95
PHA	175	120	—	—	—	—	—	—
PHG	620	410	—	—	—	—	—	—
HM	4635	2905	3145	1295	2320	1000	2580	870
DT	775	455	740	400	245	95	335	130
SD	2110	1295	1940	895	1580	660	1490	560

Open Rates for Transfer To Regular Navy Announced

Here's the latest list of "open" rates in which Naval Reserve personnel on active duty may submit application for enlistment or reenlistment in the Regular Navy in the pay grade held.

If you're a Naval Reservist on active duty for 12 months or more, serving in one of the open rates (or a related emergency service rate), you may apply to the Chief of Naval Personnel (Attn: Pers B223) via your commanding officer for a change from USNR to USN in the same pay grade.

The rates listed as open in the most recent change to BuPers Inst. 1130.4D (which is concerned with the enlistment in the Regular Navy of Navy Reserve personnel serving on active duty) include:

Chief: RD, SO, RM, IC.

First Class: RD, SO, RM, CT, IC, AT, AQ, AE.

Second Class: QM, SM, RD, SO, ET, RM, CT, EM, IC, UT, AT, AQ, AE, AG.

Third Class: QM, SM, RD, SO, TM, GS, ET, OM, RM, CT, EM, IC, UT, AT, AQ, AE, AG, TD.

Pay Grade 3: FN, SN, AN, CN, HN, DN, TN.

Pay Grade 2: FA, SA, AA, CP, HA, DA, TA.

Pay Grade 1: FR, SR, AR, CR, HR, DR, TR.

If you're a Reservist interested in going Regular, and hold one of the eligible ratings listed above, take a look at BuPers Inst. 1130.4D (Change 1) for complete details. For the last word on open rates see BuPers Notice 1130 (20 December).

Mourning Badges Not Required on Uniforms

Mourning badges or bands will no longer be worn on the military uniform by members of the armed forces except in the following cases:

- It will now be up to the individual attending a civilian funeral to use his own judgment on whether he will or will not wear the mourning badge.

- Secretaries of the military departments will prescribe the wearing of the mourning band by escorts for a military funeral.

This information is contained in SecNav Notice 1020 of 26 Nov 1957.

Your NEC Code May Help You to Get Your Choice for New Duty

THE ODDS ARE PROBABLY 10 to 1 that you haven't heard of the *Manual of Navy Enlisted Classifications* (NavPers 15105A) and possibly 50 to 1 that you have never seen it. But this one book can mean the difference between choice duty and routine duty. The choice is up to you — based on what you've done in the past.

Take the time that this Bureau had a need for Spanish-speaking Sonarmen. It was an easy matter to run cards through PAMI to come up with the Sonarmen. But PAMI couldn't tell which of these men spoke Spanish. None had bothered to mention this accomplishment, so no Sonarmen were assigned the Specialist NEC code of ESX-9834 (Spanish Interpreter). Consequently a Spanish-speaking Sonarman was

not available for use. Most PAMI cards were simply blank.

There are other similar cases which would have involved choice duty and possibly you could have been the one to get it. But if you didn't, *you have no one to blame but yourself.*

The same applies to those who are carrying four zeros as a primary NEC.

If you qualify for one or more NECs listed in the *Manual of Navy Enlisted Classifications*, either within or outside your rating, then you should be assigned the NECs for which you qualify. If you do not qualify for an NEC as listed then you will be assigned four zeros.

Take the case of a Chief Yeoman who was graduated from the U. S. Naval School, Naval Justice. In this

instance, the chief might figure that court reporting is just part of his rate, so he doesn't mention this fact and is coded with four zeros as his primary NEC. Nothing could be further from right. And this is true of every other rating.

Anyone can tell what you do by looking at your rate. What they *can't* tell and what Bureau assignment officers want to know is *what else can you do?* There's only one way this can be done — let someone know, get it entered in your record and on your PAMI card.

How do you do this? For one thing, your service record, according to article B-2306 of the *BuPers Manual*, should be revised annually on 1 September; when you are detached, and when you report. Among the many things to be

TABLE III

ESTIMATES ON PERCENTAGES OF MEN PASSING FEBRUARY 1958 EXAMS WHO WILL BE ADVANCED

Rating	Advance- ments to Pay Grade	Advance- ments to Pay Grade	Advance- ments to Pay Grade	Advance- ments to Pay Grade	Rating	Advance- ments to Pay Grade	Advance- ments to Pay Grade	Advance- ments to Pay Grade	Advance- ments to Pay Grade
	E-4	E-5	E-6	E-7		E-4	E-5	E-6	E-7
BM	3-10 %	3-10 %	3-10 %	3-10 %	BR	—	—	76-100 %	51-75 %
QM	76-100 %	76-100 %	76-100 %	11-50 %	EM	76-100 %	76-100 %	76-100 %	51-75 %
SM	76-100 %	76-100 %	76-100 %	76-100 %	IC	76-100 %	76-100 %	76-100 %	76-100 %
RD	76-100 %	76-100 %	76-100 %	76-100 %	ME	76-100 %	51-75 %	11-50 %	3-10 %
SO	76-100 %	76-100 %	76-100 %	76-100 %	FP	51-75 %	51-75 %	51-75 %	11-50 %
TM	76-100 %	76-100 %	11-50 %	3-10 %	DC	11-50 %	11-50 %	3-10 %	11-50 %
GM	11-50 %	11-50 %	3-10 %	3-10 %	PM	76-100 %	11-50 %	76-100 %	11-50 %
GS	76-100 %	76-100 %	76-100 %	76-100 %	ML	11-50 %	3-10 %	11-50 %	11-50 %
FT	11-50 %	11-50 %	11-50 %	3-10 %	SV	76-100 %	76-100 %	76-100 %	76-100 %
MN	3-10 %	3-10 %	3-10 %	3-10 %	CE	76-100 %	76-100 %	76-100 %	76-100 %
ET	76-100 %	76-100 %	51-75 %	51-75 %	CD	11-50 %	11-50 %	11-50 %	76-100 %
IM	11-50 %	11-50 %	11-50 %	11-50 %	CM	11-50 %	11-50 %	11-50 %	11-50 %
OM	76-100 %	76-100 %	11-50 %	3-10 %	BU	51-75 %	51-75 %	51-75 %	76-100 %
TE(RM)	76-100 %	76-100 %	76-100 %	76-100 %	SW	51-75 %	51-75 %	11-50 %	76-100 %
TE(YN)	11-50 %	11-50 %	11-50 %	11-50 %	UT	76-100 %	76-100 %	76-100 %	76-100 %
RM	76-100 %	76-100 %	76-100 %	76-100 %	AD	51-75 %	11-50 %	3-10 %	3-10 %
CT	76-100 %	76-100 %	76-100 %	76-100 %	AT	76-100 %	76-100 %	76-100 %	76-100 %
YN	51-75 %	51-75 %	11-50 %	11-50 %	AO	11-50 %	11-50 %	3-10 %	3-10 %
PN	11-50 %	11-50 %	51-75 %	11-50 %	AQ	76-100 %	76-100 %	76-100 %	51-75 %
MA	51-75 %	51-75 %	11-50 %	11-50 %	GF	76-100 %	76-100 %	11-50 %	3-10 %
SK	51-75 %	51-75 %	51-75 %	11-50 %	AC	76-100 %	76-100 %	76-100 %	11-50 %
DK	76-100 %	76-100 %	11-50 %	11-50 %	AB	3-10 %	11-50 %	11-50 %	3-10 %
CS	3-10 %	3-10 %	3-10 %	3-10 %	AE	76-100 %	76-100 %	76-100 %	76-100 %
SH	11-50 %	3-10 %	11-50 %	3-10 %	AM	76-100 %	76-100 %	76-100 %	11-50 %
JO	76-100 %	76-100 %	76-100 %	11-50 %	PR	76-100 %	76-100 %	51-75 %	11-50 %
LI	3-10 %	3-10 %	3-10 %	3-10 %	AG	76-100 %	76-100 %	76-100 %	51-75 %
DM	51-75 %	76-100 %	76-100 %	76-100 %	TD	76-100 %	76-100 %	51-75 %	51-75 %
MU	76-100 %	51-75 %	76-100 %	76-100 %	AK	3-10 %	11-50 %	11-50 %	11-50 %
MM	76-100 %	76-100 %	76-100 %	51-75 %	PH	11-50 %	51-75 %	11-50 %	11-50 %
EN	51-75 %	11-50 %	3-10 %	11-50 %	HM	51-75 %	11-50 %	3-10 %	3-10 %
MR	76-100 %	51-75 %	76-100 %	51-75 %	DT	11-50 %	11-50 %	3-10 %	3-10 %
BT	51-75 %	76-100 %	76-100 %	51-75 %	SD	3-10 %	3-10 %	3-10 %	3-10 %

checked is the correctness of your NEC codes. But if you figure your primary or secondary NEC is incorrect, now's the time to let your personnel office in on the information.

If you can speak, interpret or write a foreign language, that fact should be listed. If you attain additional skills through training, schooling, correspondence courses, etc., and are qualified in a particular field or trade, especially if it has no connection with your rate and have a certificate to back this up, have it entered in your record and pick up a secondary NEC to go along with it. The same goes for a specialty within your rate. And the next time

the Bureau is looking for someone in your rating group that can do some particular job, you might be the one selected.

This is how Data Processing in the Bureau gets orders issued in a hurry to those who qualify:

Suppose you are serving on board a destroyer in the Atlantic. The ship's personnel man will call you into the office and ask if you have any special qualifications other than the NEC that is carried in your record. It's to your advantage not to "just suppose" that it's correct. Take a look through NavPers 15105A and make sure.

If you do come up with another,

primary or secondary, the personnel man will make a miscellaneous entry on the daily diary, entering the additional code.

He will also record it on page four of your service record.

A copy of this daily diary is mailed each day to one of the fourteen PAMIs—in this case, the PAMI at ComServLant. The personnel man on your ship will retain the original of this diary until the end of the month, then mail it to ComServLant. When ComServLant PAMI receives the copy of the daily diary, it will make the necessary changes on the PAMI card it carries on you.

Should one of those choice billets be requested from Data Processing in the Bureau, the Bureau will send out a request, naming the qualifications necessary, to all the field PAMIs. Should it be one that calls for your qualifications, ComServLant may issue orders to your ship for your transfer.

So you can see that the only way the Bureau or your cognizant PAMI can get your qualifications is for you to start the ball rolling by talking to your personnel man.

Navy Families Like Living in Okinawa

Contemplating duty in Okinawa? If you are, look up and smile, because that cloud has a silver lining according to living condition information submitted by Patrol Squadron Four.

The squadron has been operating out of Naha Air Base on this island in the Ryukyu chain for more than a year and the personnel feel qualified to comment on conditions there. They say that the Navy family on Okinawa today occupies modern, well furnished government homes. New and well equipped exchanges and commissaries, amply stocked with both American and Oriental merchandise, are located throughout the island. Also available to personnel stationed there and to the Navy families are swimming pools, an 18-hole golf course, excellent beaches, complete athletic programs, air-conditioned service clubs and all other facilities common to naval stations.

In contrast to the chrome and polish of the American Exchange are the winding noisy streets of Naha (rebuilt since World War II) and the colorful intriguing center of the native market. In shop after shop, sailors and their families examine materials for dresses and suits, cameras, china, lacquerware and souvenirs of the Orient. Bargains are galore and here the saying is particularly true that you can go broke saving money.

The island's geography affords many recreational advantages for

servicemen serving time there. White coral beaches found everywhere are ideal for swimming, boating and skin-diving. However, the high annual rainfall and the typhoon season make it impossible to call Okinawa a second Hawaii.

R&R flights are available to squadron personnel on the island to such liberty spots as Japan, Hong Kong, the Philippines or Taiwan. But liberty on the island receives a high rating. The tea houses are popular and many a sailor finds an evening of relaxation, tea and dancing at the famous "Tea House of the August Moon."

Off duty hours can also be utilized in hobbies in the squadron's well equipped shop. Wood working, metal craft and leather work keep many busy while others build model airplanes and Hi-Fi sets.

For the photo fan the island offers many subjects. The northern part of the island is relatively untouched, and here the Okinawan can be photographed against a backdrop of rice paddies and terraced fields, in a simple heritage, according to the Squadron's information sheet.

Putting all of this together you can expect to have a good tour of duty if ordered to Okinawa where ancient traditions of the Far East blend with the modern conveniences of the West.

A roundup on living conditions in Okinawa was published in the February 1957 issue of ALL HANDS.

Courses in Atomic Defense Engineering for CEC Personnel

Two newly established courses for training in the practical aspects of Atomic Defense Engineering are being offered by the Civil Engineer Corps Officers School, Port Huemene, Calif. CEC officers, Regular and Reserve (active and inactive) as well as certain other individuals, are eligible.

The courses, *Atomic Defense Construction Engineering*, and *Structural Dynamics and Radiation Shielding*, are of two weeks' duration.

Minimum academic background required for admission is a bachelors degree in engineering or architecture and satisfactory background in atomic warfare defense (service school, correspondence, or on-the-job training).

The Atomic Defense Construction Engineering course is a prerequisite for the course in Structural Dynamics. Both courses are classified "Secret" and those ordered to the courses must be cleared for access to Secret material.

Convening dates are in the latest revision of BuPers Inst. 1500.25.

The Latest Word on Overseas Transportation of Your Family

YOU'LL FIND THE LATEST word pertaining to transportation and logistic support of military dependents in overseas areas in BuPers Inst. 1300.26. This instruction applies to all naval personnel with dependents and whose permanent duty station is a military installation or activity permanently located at a land station outside the United States. It also applies to naval personnel attached to Fleet and mobile units homeported outside the continental United States.

Here's what 1300.26 has to say:

Only authorized dependents will be transported overseas by the government.

In no event will your dependents be transported overseas unless you have a minimum of 12 months remaining on your overseas tour of duty *after* the arrival of your dependents. Requests for entry approval submitted to an overseas commander must contain a statement that you are in all respects eligible for transportation of dependents to the overseas area.

A standard uniform tour is the period of time established for duty at a specific location outside the continental United States for all military personnel. On permanent change of station, time creditable on a standard uniform tour begins with the day you depart from the United States and ends the day you return.

In getting down to definitions, 1300.26 tells who are, and who are not, authorized dependents.

Authorized dependents are:

- Military dependents authorized by law and regulations to travel overseas at government expense upon permanent change of station of their sponsor (that's you), and authorized by the appropriate military commander to be present in a military dependents' status.

Unauthorized dependents are:



"You told me to tie her up!"

- Dependents of a person in pay grade E-4 with four years or less service and pay grades E-3, E-2 and E-1.

- Dependents of personnel entitled to government expense travel who enter an overseas area *without* military authorization.

- Dependents who are acquired *without* military authorization when authorization is required.

- Dependents whose sponsor has insufficient obligated service to complete the prescribed tour.

If, in reading this, you find that your dependents are in the "unauthorized" class *because you don't have sufficient obligated service to complete your prescribed tour*, don't throw your hands up in the air and start counting your pennies just yet—there is still hope.

You can be reclassified by the appropriate military commanders as a member with authorized dependents when you attain the requirements of eligibility.

Here are some of the ways you can acquire sufficient obligated service to complete your overseas tour: by reenlisting, executing a voluntary agreement to extend your enlistment, or agree to remain on active duty.

"Sure," you say. "They get me to extend, and then don't approve entry of my dependents."

You have an out here, too. If you do agree to extend your enlistment for the primary purpose of acquiring sufficient obligated service to complete the overseas tour, it may be conditional to the extent that it is *subject to cancellation if your dependents' entry is not approved*. But make sure there is an entry in your service record to this effect as required by Art. C-1407(3), *BuPers Manual*.

If you have over 17 years' active duty and want to complete the maximum applicable prescribed overseas tour, you must sign an agreement on page 13 of your service record to remain on active duty if transferred to the Fleet Reserve. If you must extend your obligated service and want to be sure you receive maximum benefits such as reenlistment bonus, travel pay, and reimbursement for leave, you should check these directives:

- Regular Navy — Appropriate BuPers Inst. of the 1133 series.

- Fleet Reserve — Appropriate BuPers Inst. of the 1910.5 series.

- Naval Reserve — Appropriate BuPers Inst. of the 1910.5 and 1133 series.

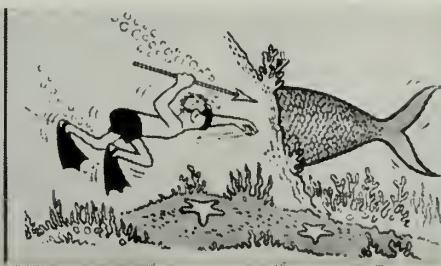
- Men entering the Navy through Selective Service System — BuPers Inst. 1133.8 series.

Reserve officers may request an extension of active duty from the Chief of Naval Personnel in order to acquire necessary obligated service.

Here are a couple of additional highlights taken from the instruction:

Unauthorized dependents on station on or before 6 Jun 1957 may be furnished "space available" transportation to the United States.

Unauthorized dependents who



entered an overseas area after 6 Jun 1957 may be furnished space available transportation to the United States if unused space occurs on government transportation which has been scheduled at the minimum to meet requirements for government expense travelers. They will not be assigned special priorities which interfere with timely movement of other "space available" travelers. You will bear financial responsibility of the return transportation of your dependents if they are in this category. And you should keep in mind that excessive delays may be expected before space available transportation will occur.

In wrapping this up, here is the latest information on logistic support of dependents:

Authorized dependents will con-

tinue to be provided logistic support as in the past.

Unauthorized dependents, if on station on or before 6 Jun 1957 will be identified as authorized dependents.

Others will be furnished all services provided for by law including medical service, and will be entitled to the same privileges as authorized dependents, including but not limited to PX and commissary facilities wherever these privileges are available for authorized dependents.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and

notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; Bupers Instructions and Notices apply to all ships and stations.

Alnavs

No. 54—Announced approval by the President of reports of selection boards which recommended USN and USNR line officers (men and women) to the grades of lieutenant and lieutenant commander.

No. 55—Expressed best Christmas wishes from the SecNav.

This Is the Tale of the Flying Bolt Who Went

It's not often that we get an article about nuts and bolts that we think ALL HANDS readers will be interested in, but here's one with a nice twist. It appeared in the "Graphic View"—monthly newsletter put out by Heavy Photographic Squadron 61, serving with ComAirPac.

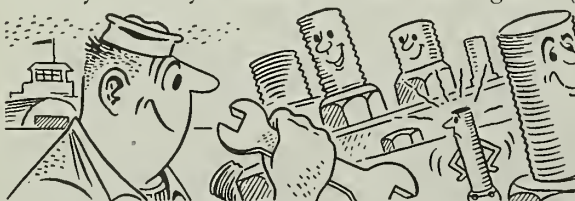
ONCE UPON A TIME there was a very tiny bolt (it wasn't so small when compared with the minute



bolts used in miniature instruments, but it was definitely tiny in comparison with the bolts located nearby). This bolt was one-fourth inch in diameter and one inch long, while most of those around it were much bigger around and a lot longer.

This made the little bolt feel insignificant and quite useless. It didn't add to tiny bolt's pride a bit, to know that it was only seldom, if ever, that someone looked at him to see if he was doing his job properly. In fact, tiny bolt felt lucky if someone bothered to check him as often as every sixty hours or so.

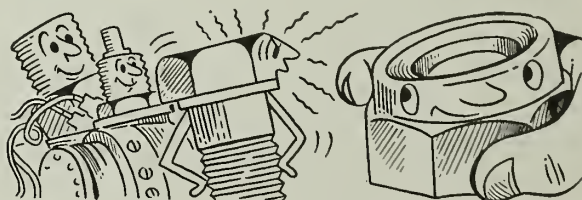
Every time tiny bolt saw a human hand tightening



or checking the bigger bolts around him, his pride was so wounded that he wished there was some way he could show his worth and make everyone sorry that they didn't pay more attention to him.

Tiny bolt vowed that some day, some way, he would "show them all" . . . and the only thing that held him back was his friend, a stop nut, that kept a firm grip upon tiny bolt and wouldn't let him do anything foolish or rash. Try as he may, though, tiny bolt couldn't convince stop-nut that the two should work in "cahoots" and throw a monkey wrench into the works. (You see, stop-nut was well adjusted and in spite of his small size, he realized his worth in the scheme of things.)

One day (and a sad day it was for tiny bolt), some human came along and transferred stop-nut. He removed stop-nut from his station next to tiny bolt and placed him in a tool box on top of a work stand.



Now this human had no intention of keeping stop-nut away from his friend tiny bolt for any length of time—just long enough to remove an item that stop-nut was standing in the way of.

When the human walked away and left stop-nut all by himself in the tool box, stop-nut shouted as loud as his little voice would allow, but to no avail—for the human was thinking of a cup of coffee and a cigarette—not about the fact that he had removed tiny bolt's only friend. The human didn't realize that

No. 56—Announced approval by the President of reports of selection boards which recommended USN and USNR officers for promotion to lieutenant commander in the Medical Corps, Supply Corps, Chaplain Corps, Civil Engineer Corps, Dental Corps, Medical Service Corps and Nurse Corps; to lieutenant in the Medical Corps, Supply Corps, Chaplain Corps, Civil Engineer Corps, Dental Corps, Medical Service Corps and Nurse Corps.

No. 57—Emphasizes that no member of a general or special court martial may consult the Manual for Courts-Martial during closed session of court.

No. 58—Announced change in commuted and leave rations for enlisted personnel, effective 1 Jan 1958.

BuPers Instructions

No. 1120.18E—Outlines eligibility requirements whereby USN personnel may seek appointment to commissioned status in the Regular Navy in either the Integration, LDO or Warrant Officer program.

No. 1300.26—Implements those parts of the Department of Defense instructions pertaining to transportation and logistic support of military dependents in overseas areas.

No. 1306.46A—Sets forth the policy relative to the administration of enlisted personnel serving in special weapons activities.

No. 1640.5—Defines the criteria for designation of a confinement facility.

BuPers Notices

No. 1133 (25 November)—Reem-

phasized the continuing need of Navy Career Appraisal Teams in the reenlistment program and outlined the concept of their occupational functions.

No. 1416 (27 November)—Announced Change No. 1 to BuPers Inst. 1416.4B, which is concerned with the professional fitness for promotion of Naval Reserve officers not on active duty.

No. 1223 (10 December)—Provided information concerning concepts established for an evolutionary revision of the enlisted rating structure.

No. 1130 (20 December)—Announced Change No. 1 to BuPers Inst. 1130.4D, which is concerned with enlistment in the Regular Navy of Naval Reserve personnel serving on active duty.

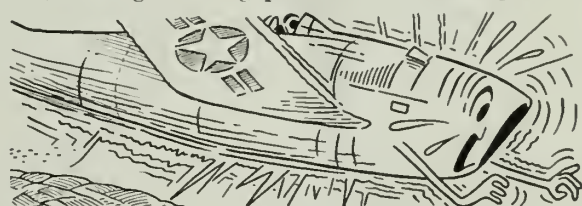
Nuts—As Told to All Hands by a Navy Chief

stop-nut was the only one really close enough to tiny bolt to keep him in line—and keep him from taking the first chance to show his importance by running away from his job.

Ole "human" completely forgot about stop-nut. He glanced at stop-nut many times, lying there in the tool box, but never once did it dawn upon him that stop-nut had been removed from his natural habitat. Now tiny bolt had just the opportunity he had longed for—a chance to show the bigger bolts that in spite of their size and popularity among humans, he (tiny bolt, the tiniest bolt of them all), was of some importance too.

Tiny bolt waited for just the right situation to come along, where his absence would really make the humans and the larger bolts take notice. He went along with the program for several days, just as if

to whirl as he left the ground. He knew instinctively that this was his big moment—he twisted, turned, and strained and—without too much real effort on his part—he jumped right out of the fitting he was supposed to be holding down. Down and down he fell, landing in a big pool of oil inside a piece of

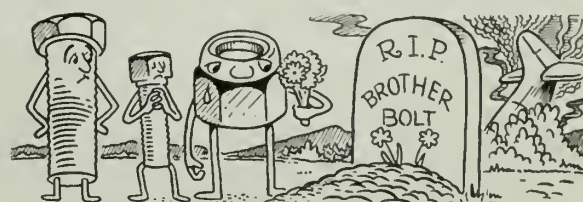


engine cowling. He lay there quite still, waiting for the inevitable.

The human sensed something wrong. He couldn't control the straining monster that was pulling him through the air—the monster lurched forward and started running wild—the human was doomed. The monster pulled him down to the ground at too great a speed and human, monster, and tiny bolt all perished in the resulting crash.

Naturally stop-nut attended the funeral of his friend tiny bolt—and as he left the chapel he was heard to say, "If I could only have been there with poor tiny bolt to hold him back. He was lost without me."

—R. W. Mills, ADC, USN.



he were perfectly happy to do his job without his friend stop-nut around.

Then one day he heard the human bragging about what a good job he always did and he heard other humans swallowing the story wholeheartedly. Now, said tiny bolt, now is the time. I'll not only show the big bolts, but I'll make a monkey out of this smug human at the same time.

Tiny bolt waited; he felt himself tugged and pulled upon, he felt his body tremble from the vibrations applied upon him, he felt his head start

Do You Know the Laws in Your Area on Car Ownership?

The car you call your own can be a beautiful acquisition as well as a vital necessity—but the problems of automobile ownership are many and varied. In addition to paying for and maintaining a car and staying out of accidents, which every car owner is faced with, the serviceman has to keep abreast of the varied laws of the different legal jurisdictions to which he is ordered.

Take the process of registering a car. A legal specialist in Navy JAG passes on this info. The Soldier's and Sailor's Civil Relief Act of 1940 (as amended) prohibits a state, in which a man is living solely because of military orders, from requiring registration if the car is properly registered in the state of his legal residence. However, some states say, if the car is registered in both the husband's and wife's names it must be registered in the state in which they are living or the registration changed to the name of the serviceman alone. They reason that the law provides protection only to the serviceman.

Compounding the problem, cer-

tain city or county governments require license plates issued by them for their jurisdiction if the car is registered in their state while others do not require local tags if the car carries a military installation pass. Other localities require that a serviceman's car carry a special license (issued free), even if it is registered out of the state while some require no local license at all.

Driver's license requirements vary from state to state. Most require only a valid license from the

state in which the car is registered but there appears no reason why a state could not require a serviceman to obtain a driver's license, since this is an exercise of police power and not a tax. Dependents of service personnel face the same problem. Some states require that they obtain an operator's permit within a certain time while others accept any valid license.

Automotive inspection laws as passed in the various states usually apply only to cars registered locally, but in the exercise of police power there appears no reason why they could not be made to apply to all cars regardless of place of registration.

Financial responsibility laws requiring liability insurance under certain circumstances or proof of the ability to pay claims originating from an accident have been passed in various forms by all of the states. Massachusetts has a law requiring automobile insurance on all cars while other states require a showing of financial responsibility by persons who have been convicted of certain offenses. Another type of law in this category

is the "security type" act. This law requires the owner of a car involved in an accident where there are damages over a certain amount to show that he is financially able to pay claims which may be made against him.

Violation of any of these laws relating to automobiles, either through neglect or ignorance, can involve court costs and fines. Remember "ignorance of the law is no excuse." Seek advice from your local Legal Assistance Officer or the local motor vehicles office.

Navy's Underwater Demolition Training Is Realistic at Amphibious Base, Coronado

Night reconnaissance problems and reveille at 0600 with 45 minutes of calisthenics before breakfast aren't included in the schedule of any ordinary Navy training school. But it is part of the Navy's Underwater Demolition training program, one of the toughest courses offered anywhere.

On a recent Monday, 32 future "frogmen" and the underwater demolition instructor staff from the Naval Amphibious Base, Coronado, Calif., boarded landing ship tank *USS Tioga County* (LST 1158) off Southern California's Silver Strand. Carrying the full equipment necessary for a four-week training period, the group headed for the isolated camp-site on Clemente Island, 70 miles from San Diego.

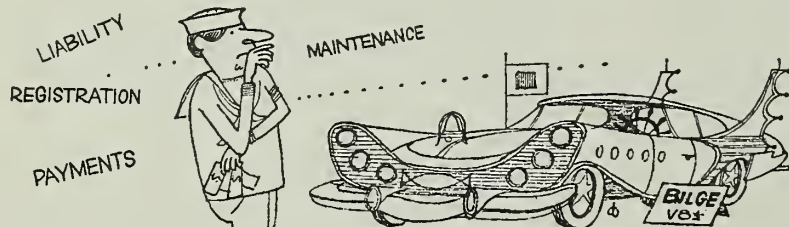
The day after they sailed the trainees disembarked from the LST, trucked 17 miles to China Point, set up tents and were ready for the first training problem.

During the next month they were to participate in problems lasting until midnight or later, conduct hours of physical drill, and swim miles on reconnaissance and high-explosive demolition missions.

On the island, the future "frogmen" had their first actual contact with high explosives. Here they put classroom studies into actual use; cutting fuses, setting explosives on steel railroad rails, and placing demolition packs on underwater obstacles.

Daylight beach recon swims, using the unique "drop and pick-up" method for getting swimmers in and out of the water, are essential parts of the training. An LCPR (landing craft personnel, ramp), moving at high speed with a rubber boat lashed alongside, drops swimmers in pairs off the proposed recon area. They swim into the beach, making notes on slates of plexiglas concerning the depth of water, underwater obstacles or projections, nature of the beach floor and condition of surf.

Returning to the pick-up lane, the swimmers form a straight, evenly spaced line. They are literally snatched from the water by the "pick-up man" into the rubber boat pulled at high speed by the LCPR. As the craft approaches the waiting



swimmers, the pick-up man passes a loop over the upraised arm of the swimmer, drawing him into the rubber boat.

After two weeks on the island, the trainees returned to the Amphibious Base at Coronado for one weekend, then went back to the island aboard USS *La Moure County* (LST 883). During the second two weeks of training on the island, the training class operated from the LST, conducting operations under the same conditions as if the ship had been a fast transport and San Clemente an enemy island.

After-dark problems, consisting of swimming recon, simulated enemy beach infiltration and demolition raids were nightly occurrence for the trainees. Each problem was preceded by a briefing given to the trainees, in which the situation was outlined, charts studied and the problem planned.

The IBS (inflatable boat, small) is used in all problems and the boat crews, composed of seven men, operate as a unit in all phases of the training.

The "buddy" system is rigidly enforced among the trainees, both for efficiency and safety. This means that two men operate together, always alert to each partner and ready to give assistance.

One night swimmer, heading toward the beach in the black darkness of a cloudy night, mistook a large sea lion for his "buddy." The seal roughed up the swimmer in a most "un-buddy" like manner, in its hasty departure.

The four-week training period on the island climaxed the greater part of the rigid 16-week training program. Fewer than 50 per cent of the trainees weather the course to graduate as Navy "Frogmen."

—Joe W. Bassett, SN, USN

More Petty Officers Promoted to Warrant Officer Grade

Thirty more petty officers have been issued temporary appointments to Warrant Officer, W-1.

Appointments include: Boatswain, 3; Surface Ordnance Technician, 2; Machinist, 1; Electrician, 1; Aviation Electronic Technician, 5; Communication Technician, 4; Electronics Technician, 3; Ship's Clerk, 3; Supply Clerk, 5; Dental Service Warrant, 1; Civil Engineer Corps, 2.

HOW DID IT START

Cumshaw

According to the "Almanac," monthly publication of USS *Bon Homme Richard* (CVA 31), not many people are familiar with the origins of the art of cumshaw. So, one of the Almanac's writers turned to and came up with a treatise on the subject which promises to add to the confusion.

Since most of the facts revealed by this seagoing historian are apparently brand new, the treatise is an item of considerable unimportance in historical circles. Therefore, to give you a chance to judge for yourself, here (in part) is what he says:

"Originally spelled kumshaugh, the art of cumshaw was founded in Scotland in the 15th century by the Earl of Malavah, a bit of a sneak thief and a porchclimber, who was killed one night while trying to barter the tartans of his clan for a race-horse. A noted Scotch poet recorded the event in his famous 'Ode to a Kumshaugh,' which begins with the immortal line: 'O ye brae the bonnie, and kumshaugh on the night.'

"Soon the term became a part of the sea. Old British mariners had an expression, 'Cox'n on kumshaugh,' which meant, 'Don't give the cox'n any food because he found no whales today.'

"Later, cumshaw spread to the New England whaling towns. When the great whaling fleets would set out on their long cruises the townspeople would gather on the wharves and piers and cry at the top of their lungs—"Forsaketh thou cumshaw and stab the whales." The true origins of this expression have become obscure, but the noted historian, Arnold Whelp, feels that it means, 'Knock off the cumshaw and stick the whales.' It sounds plausible.

"In the Navy the first case of cumshaw as we know it today occurred in 1894, when an able seaman in the old light cruiser USS *Watts* traded, or cumshawed, 400 sacks of potatoes from USS *Tuber*. Most of *Watts*' crew subsequently expired of ptomaine poisoning, and from this incident comes the Navy expression, 'Don't cumshaw rotten potatoes.'

"Today the art of cumshaw is bigger than ever. Nary a day goes by on *Bon Homme Richard* when someone doesn't see something he wants and tries to obtain it by wit and wile. For instance, say you're down on the mess decks and you see a lemon pie left over from the noon meal. You want to share that pie with your friends back in the paper clip locker.

"There are a couple of ways to accomplish this. First, you can walk up, hook the pie and slip it inside your shirt. This isn't sporting—and it's kind of messy too—so you ask a cook. He says, 'Unh, unh,' which means 'no,' so you try the artist's



approach. You edge over to him and start a conversation with a gambit like this: 'Those pots sure are big, ain't they?'

"He'll ignore you.

"'You guys sure keep 'em clean too,' you'll say.

"He'll still ignore you.

"Then, you'll play your trump: 'You ever need any paper clips—just come up and see me—I got tons of 'em. Just ask for Jones, Clip-Keeper, third.'

"At that the cook looks interested. 'Remember, Jones, CK3,' you say, 'By the way, how about that pie?'

"He turns his back. You've won.

"Another good cumshaw gambit runs something like this: 'Boy oh Boy! Did we get some hot stuff off the wireless.'

"The guy in charge of whatever it is you want will be dying to know what you're talking about, so you egg him on. 'Boy! This thing will really blow the roof off everything—I mean for all the married men on board.' (You happen to know this guy has a wife and seven kids.)

"The guy becomes frenzied and you know you've got him, so you say, 'I'll betcha if I had one of those gizmos on the shelf, I'd let you in on it.'

"Swiftly, he produces the gizmo and throws in an all-weather can-opener to boot. Then you can tell him anything—maybe some real hot news like, 'The AD is the workhorse of the Navy.'

"You've now got what you want, that's all that matters, for this is the real spirit behind cumshaw."

Editor's Note: In case you're interested in straight facts, Webster's big dictionary says the word "cumshaw" is a corruption of a phrase, meaning "grateful thanks," which is used by beggars on Amoy and in China. On Amoy the phrase is "kah sia" and in the Pekinese dialect it's "kan hsieh." It means "a present or bonus; a gratuity; a tip."

BOOKS:

PLENTY OF VARIETY FOUND IN THIS MONTH'S SELECTION

THE SUBJECTS COVERED in the books selected for review by the Library Services Branch this month contain comedy, war, strategy, skin diving, foreign relations, mapmaking and the German navy.

Ensign O'Toole and Me, by CAPT William J. Lederer, USN. A new, hilarious, and partly serious skirmish and love affair with the United States Navy. It covers quite a range, up the Yangtze, down the China Sea, into the Pentagon, and roughshod through the Admiral's mess.

It is a saga of uproarious incidents and people. Much of it is concerned with Captain Lederer's friend and accomplice, Terrence O'Toole, the redhead whose exploits ranged from a wild bit of wartime espionage to an escapade involving a fortune teller in Manila, a beautiful girl, and a gross lie which resulted in Captain Lederer's marriage.

The Bridge at Remagen: The amazing story of the day we crossed the Rhine, by Ken Hechler. This volume, based on extensive interviews with German and American participants, is the first complete, authoritative account of what happened on that fateful day. It is the story of a great risk boldly accepted, and of the surprising way in which a relative handful of men, acting with daring and initiative, altered the course of history.

The Great Deterrent: A collection of lectures, articles, and broadcasts on the development of strategic policy in the nuclear age, by Sir John Slessor. This book covers an extremely wide range, both in time and subject matter. Taking as his starting-point the German plan for a European war made by von Schlieffen and the younger von Moltke in 1914, Sir John analyzes and discusses the strategical problems which followed the development of mechanized warfare and the subsequent growth of air power.

In these remarkably lucid and hard-hitting essays, he gives a parallel picture of progress in the world of strategy, and a clearly defined statement of current thought.

The Science of Skin and Scuba Diving: Adventuring with safety under water, developed by the Conference for National Co-operation in

Aquatics. Here is everything the skin diver needs to know about water skills and "watermanship" to insure safe and scientific diving as a hobby or sport.

Army and Navy authorities, medical specialists and experienced divers and trainers from all parts of the country present thorough, complete, medically sound and up-to-date information on every aspect of the sport.

Clear and authoritative information is provided on such subjects as: medical aspects of diving; gases used for Scuba; types of apparatus (including repair methods); currents, visibility, marine life; first aid for diving accidents (exhaustion, bends, marine life injuries, etc.); Scuba training techniques; buddy system, etc.

Professional and advanced divers, beginning students, teachers and anyone who wants to learn skin and Scuba diving can now possess the latest techniques and skills in the use of underwater gear from this fully illustrated manual. Each of the chapters is by a specialist in the subject discussed.

Japan between East and West: In this book, six experts, working with a study group of the Council on Foreign Relations, present their views on the future of Japan.

Hugh Borton, in his article *Politics and the Future of Democracy in Japan*, discusses the conflicts that are still raging over the continuation of many occupation reforms.

Communist exploitation is taken up by Paul F. Langer in *Communism*



"Get those heads up high—WAN TOOP
THUR-EEP—FA. . ."

in *Independent Japan*. Jerome B. Cohen deals with *International Aspects of Japan's Economic Situation*. In the section *Literary and Intellectual Currents in Postwar Japan and Their International Implications*, Donald Keene is the author. C. Martin Wilbur covers *Japan and the Rise of Communist China*.

In the final section of the book, William J. Jordan discusses *Japan's Diplomacy Between East and West*, as it is seen by the Communists, by the non-Communist world and by itself.

The Mapmaker: A novel of a great navigator who sailed 50 years before Columbus, by Frank G. Slaughter. Here is the story of Andrea Bianco (El Hakim), a real Venetian mapmaker whose brilliant navigation long before Columbus added so much to the fame of Portugal's Prince Henry the Navigator. True history is an integral part of every page — and so is romance, daring, and intrigue.

It has the promise of a battle at sea, of cutlass striking scimitar, of death and rescue, and a meeting with the beautiful Dona Leonor.

Der Seekrieg, The German Navy's Story 1939-1945, by Vice Admiral Friedrich Ruge, German Federal Navy. Beginning with a brief background of Germany's rise to a world sea power at the turn of the century, and its virtual banishment from the seas as a result of the First World War and the Treaty of Versailles, Admiral Ruge's book (translated into English it means *The Sea War*), tells how laboriously, yet efficiently the small corps of professional German naval officers worked to build up the navy of the German Republic which at a later date fell under the control of Adolf Hitler as dictator. Their labors were not made easier by the fact that the new dictator, Adolf Hitler, was landminded — a former soldier, who thought primarily in terms of huge armies and an all powerful air force, for whose men and weapons the naval establishment was penalized in every field.

Admiral Ruge sketches with bold strokes the country's headlong plunge into war — a war for which they knew the navy was not ready, and which Hitler had promised would not come for years, and even then, never against Great Britain, a leading sea power of the day. It makes good reading.

FIGHTING THE U.S. NAVY



**A report on Admiral Farragut's passage of Forts Jackson and St. Philip, La.,
by Confederate Brigadier General Johnson K. Duncan, the man who tried to stop him.**

One of the Navy's most important victories of the Civil War was the capture of New Orleans in 1862 by the naval force under Flag Officer David G. Farragut, USN. The key to the city's defenses was a pair of Confederate forts—Jackson on the right bank of the Mississippi and St. Philip on the left—about eight miles above the shoal water at the mouth of the river.

Farragut's success in passing the forts, and the courage and daring which made the feat possible, earned him wide acclaim, but there was also plenty of courage on the part of the Confederate defenders, many of whom had seen little or no combat. The forts stood up under a terrific pounding by Union mortar boats. The river was high and the forts were partly flooded, so that the men in them were wet, sick and miserable most of the time. Eventually, they mutinied, but not until after Farragut had passed and their cause was lost.

A description of what it was like to be on the receiving end of Admiral Farragut's attack is related by extracts, freely revised, from the operational report of the man who commanded the forts, General Duncan.

ABOUT THE 27TH of March, I was informed by Lieut.-Col. Edward Higgins, commanding Forts Jackson and St. Philip, which composed a part of the coast defenses under my command, that the enemy's fleet was crossing the bars and entering the Mississippi river in force. Since I had always thought the attack on New Orleans would be made from that quarter, I repaired at once to Fort Jackson to assume general command. Upon my arrival, I found that Fort Jackson was suffering severely from the excessive rise in the river.

Despite every effort which could be made to stop it, the water kept increasing upon us until the parade-plain and casemates were very generally submerged to a depth

of from three to 18 inches. Only by isolating the magazines and by pumping day and night could water be kept out of them.

As the officers and men were all obliged to live in these open and submerged casemates, they were greatly exposed to discomfort and sickness. Their uniforms and feet were always wet. Fort St. Philip was in a similar condition, but to a lesser extent.

In preparation for the expected attack, it was necessary to bring in, mount and build platforms for the three 10-inch and three 8-inch columbiads, the rifled 42-pounder, and the five 10-inch sea coast mortars, recently obtained from Pensacola on the evacuation of that place, together with two rifled 7-inch guns, temporarily borrowed from the naval authorities in New Orleans. It was also found necessary to complete the old water battery, to the rear of and below Fort Jackson, for the reception of some of these guns. In addition, mortar proof magazines and shell rooms had to be constructed within the water batteries and all the main magazines at both forts had to be covered with sand bags to a considerable depth to protect them against a vertical mortar fire.

THROUGH GREAT EXERTIONS, cheerfully made by both officers and men, and working the garrisons by reliefs night and day, this work was all accomplished by the 13th of April. However, no sooner had the two rifled 7-inch navy guns been placed in position than orders arrived to dismount one of them and send it to the city at once to be placed on board the iron-clad steamer *Louisiana*. It was accordingly sent, but with great

From Reports of the Naval Engagements on the Mississippi River, Resulting in the capture of Forts Jackson and St. Philip and the City of New Orleans and the Destruction of the Rebel Naval Flotilla. Government Printing Office, Washington, 1862.



GLOWING PLACES — Failure of fire rafts set to drift into Union ships contributed to forts' downfall.

difficulty owing to the overflow and the other causes stated. The garrisons of both forts were greatly fatigued and worn out by these labors—performed under pressure, within sight of the enemy and under many discomforts and disadvantages caused by the high water.

In the meantime, I had called upon the general commanding the department, for two regiments to be stationed at the quarantine buildings, six miles above the forts, to act as a reserve force and to cooperate with the forts in case of a combined land and water attack. I also asked for Capt. W. G. Mullen's company of scouts and sharpshooters to be stationed in the woods below Fort Jackson, on the right bank of the river, for the purpose of picking off officers and men from the enemy's vessels when these ships assumed their positions of attack. Capt. Mullen's company of about 125 men was sent down as requested and stationed, in part, in the point of woods below Fort Jackson. The remainder were stationed on the Fort St. Philip side, opposite the raft obstructing the river. The Chalmette regiment, consisting of about 500 men, Col. Syzmanski commanding, was sent to the quarantine. A part of it was stationed there, and company detachments were placed at the head of the several canals, leading from the river into the back bays, to guard against a land force above us.

Four steamers of the river fleet—*Warrior*, *Stonewall Jackson*, *Defiance* and *Resolute*—protected, and to a certain extent made shot-proof with cotton bulk-heads, and prepared with iron prows to act as rams, were sent down to cooperate with me. The steamers *Governor Moore* and *General Quitman*, similarly prepared, were sent down in like manner to cooperate with the forts and ram such vessels of the enemy as might succeed in passing. The naval authorities also sent down the C. S. steam ram *Manassas*, which was stationed a short distance above Fort Jackson with her steam up constantly, to act against the enemy as occasion might offer. Subsequently, the C. S. Steamer *Jackson* also arrived.

A raft of logs and chains, which had formerly been placed across the river, had proven a failure, so a new obstruction had been placed across the river, opposite Fort Jackson, by Lieut.-Col. E. Higgins. This consisted of a line of schooners, anchored at intervals with bows up stream and chained together amidships as well as stern-and-stem. The rigging, ratlines and cable were left to trail astern of the schooners as an additional impediment to tangle in the propeller wheels of the enemy. The schooner raft was seriously damaged by a wind storm on the 10th and 11th of April which parted the chains, scattered the schooners and materially affected its effectiveness as an obstruction.

In addition to this, the raft was also badly damaged when some of the fire barges got loose and drifted against it. A large number of these fire barges were tied to the banks above both forts, ready at all times to be towed into the current and against the enemy. This was for a double purpose—firing his ships and lighting up the river by night to insure the accuracy of our fire. My in-

structions to the river fleet were to be in the stream above the raft to assist the forts with their fire and to turn in and ram, at all hazards, all vessels that might succeed in getting above the raft. The fleet was also required to take control of the fire barges, reconnoiter the enemy above the head of the passes and keep a watch boat below every night, near the point of woods, to signal the approach of the enemy.

WHILE THE ENEMY remained at the Head of the Passes, 22½ miles below the forts and, later, when he came to the Jump, or Wilder's Bayou, the boats of the river fleet took turns in running down and watching his movements. For a few nights, at this time, one of them was also kept below as a guard boat. We also had telegraphic communication down to within half a mile of the Jumps, (nine miles below the forts). This, together with scouts operating in the bays to the east and west of the river in skiffs and pirogues, kept us posted on the enemy's movements below as far down as the Southwest Pass.

Meanwhile, the enemy was not idle. His large vessels were worked over the Southwest bar, after failing to make an entrance at Pass a l'Outre, and the mortar fleet was brought up as far as the Southwest Pilot Station, where the mortars were scaled and afterwards tested. From seven to 13 steam sloops of war and gunboats were constantly kept at the Head of the Passes or at the Jump to cover the operations below and prevent our observing his movements on the river. By gradual and regular approaches he carefully closed up to the forts day-by-day and opened his attack.

On April 9 one of our reconnoitering steamers was chased and followed up by two of the enemy's gunboats as far as the point of the woods below Fort Jackson, but the gunboats were soon forced to retire by a few shots from our batteries. This was his first reconnaissance, and our fire was not returned.

On April 13 several of the hostile gunboats came up to make observations. They would occasionally show themselves singly or in pairs, above the point of woods, then exchange a few shots with the forts and retire again behind the point. Our sharpshooters obtained a few shots on this occasion, but without much effect. Many of the men were up to their waists in water. In consequence, sickness prevailed among them and unfitted them for duty.

The enemy spent the principal part of the 13th in firing grape and canister, and in shelling the woods to drive the sharpshooters out. This was repeated the following day, the enemy not coming within range or sight of the forts but confining himself to shelling the woods below. The sharpshooters were all driven out by this second day's firing. Our telegraphic communication below was also broken up, as the wires were removed and many of the posts cut and torn down by the enemy.

Since there was no other point, above or below, where the sharpshooters could profitably act in that capacity and, since many of them were unfit for duty from exposure, I decided to send them to the city, which was accordingly done.

TO KEEP UP telegraphic communication below, Lieut. T. J. Royster's company, sappers and miners, 22d Regiment, Louisiana Volunteers, offered his services with 15 men of his company to act as sharpshooters in pirogues, covering the operator while he repaired the

line and re-established the connection with the forts above. This also failed, because it was so difficult to manage the pirogues effectively in the dense undergrowth of the swampy woods below. As a result, the telegraph and sharpshooters had to be abandoned.

On April 15th the enemy brought up his whole fleet, extending it from the Head of the Passes to the Point of Woods below the forts. Orders were repeatedly given to the river fleet to send the fire barges down nightly, but the barges were cut adrift too soon, so that they drifted against the banks directly under the forts, fired our wharves and lit us up while obscuring the position of the enemy.

On April 16th from 7:30 A.M. on, the enemy's gunboats came round the point repeatedly for observation, but were invariably forced to retire by our fire. In the meantime, he was locating the position of the mortar flotilla, composed of 21 schooners, each mounting one 13-inch mortar, plus other guns. The flotilla was close against the bank on the Fort Jackson side, and behind the point of woods.

At 4:30 P.M. the enemy ran out a gunboat and fired upon the fort, under cover of which two mortar boats were brought out into the stream. These boats opened fire upon Fort Jackson at 5.00 P.M. and continued firing for an hour and a half. Then, under our fire, the enemy retired behind the point of woods.

One fire barge was sent down successfully against the enemy at 4:00 A.M. It drifted in among his vessels and created considerable confusion when it was fired upon by them. During the day, Capts, Renshaw, Kennon, Seant, Stephenson and Hooper passed in turns with their boats below the raft (now very much disconnected and scattered) and exchanged a few shots with the hostile gunboats and mortar-boats.

Two more abortive attempts were made to send down fire-barges against the enemy during the night.

○N APRIL 18th at 9:00 A.M., the enemy opened upon Fort Jackson with his entire mortar fleet of 21 vessels

and rifled guns from his gunboats. Fifteen of them were concealed behind the point of woods and the other six were hauled out in the stream at an angle with them just at the extreme range of our heaviest guns. Our fire disabled one gunboat and one mortar-boat, causing those in the stream to retire behind the cover of the woods, but generally our shots fell short for lack of elevation caused by the inferiority of our powder. Even our nearest gun—a 10-inch sea-coast mortar—would not reach his boats with the heaviest charges. The enemy ceased firing at 7:00 P.M., having fired this day 2,997 mortar shells.

The quarters in the bastions were fired and burned down early in the day, as were the quarters immediately outside the fort. The citadel was set on fire several times during the day. At first, the fires were extinguished, but later it became impossible to put out the flames. When the enemy ceased firing the citadel was one burning mass, greatly endangering the magazines. Many of the men and most of the officers lost their bedding and clothing in these fires, which greatly added to the discomforts caused by the flooding. The mortar fire was accurate and terrible, many of the shells falling everywhere within the fort, and disabling some of our best guns.

During the night the enemy sent up two launches to examine the character of the raft obstructing the river.

On April 19th the mortar fleet again opened fire at 6:30 A.M., and the fire was constantly kept up throughout the day. Gunboats constantly came above the point during the day to engage the forts, but were as constantly driven back by our fire. One of them which we crippled was towed behind the point of woods. The enemy's fire was excellent, a large proportion of his shells falling within Fort Jackson. The terreplein, paradeplain, parapets and platforms were very much cut up and the casemates were severely damaged. The magazines were considerably threatened and one shell passed through into the casemates containing fixed ammunition. In addition, the enemy's fire disabled one 10-inch and one 8-inch columbiad, one 32 and one 24-pounder and

UP THE RIVER — Commodore Farragut's squadron and Captain Porter's mortar fleet enter the mouth of Mississippi.





UNION GUNS inflicted great damage to interior of Fort Jackson during the eight-day bombardment.

one 10-inch siege mortar in the main work, plus two 32-pounders in the water battery.

On April 20th there was some rain in the morning and the wind was very high. Bombardment was constant throughout the day with occasional shots from gunboats around the point. Between 11:00 and 12:00 P.M., under cover of the heaviest shelling thus far, one of the enemy's gunboats came up in the darkness and attempted to cut the chains of the raft, and drag off the schooners. A heavy fire was opened upon her, but she did not retire until she had partially accomplished her purpose. After this, the raft could not be regarded as an obstruction. The fire continued without interruption all night.

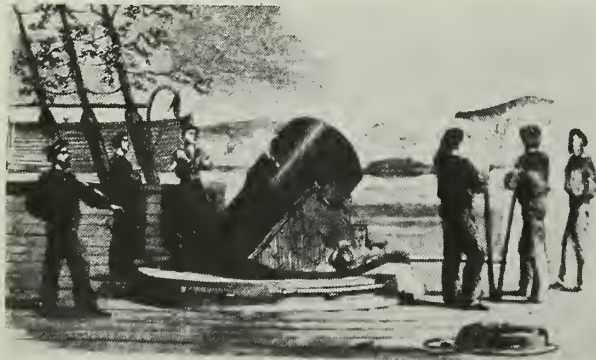
On April 21st firing continued all day and all night without interruption. By this time, Fort Jackson was in need of extensive repairs almost everywhere.

ON APRIL 22nd bombardment continued during the day and night, being at times very heavy. During the day our fire was principally confined to shelling the point of woods from both forts, and with apparently good results, as the mortar-fire was slackened toward evening. The casemates were very much cut up by the enemy's fire, which was increased at night. There was little or no success in sending down fire barges, owing in part to the condition of the towboats.

On April 23rd, a warm, clear and cloudless day, the entire command was turned out to repair damages under very heavy enemy fire. The bombardment continued without intermission throughout the day, but slackened off about noon when there was every indication of an exhaustion on the part of the mortar flotilla. Hence it became evident that the tactics of the enemy would be changed into an attack with broadsides by his larger vessels.

Just before sundown, under a very heavy mortar fire, the enemy sent up a small boat and a series of white flags were planted on the Fort St. Philip bank of the river, commencing about 380 yards above a lone tree

MORTAR FLOTILLA delivered heavy and accurate fire on Fort Jackson, firing 2997 shells on the first day.



on that shore. This confirmed my previous views of an early attack, different from the usual mortar bombardment, since I presumed that these flags indicated positions to be taken up by the several vessels in their new line of operation.

THE BOMBARDMENT CONTINUED all night, and grew furious towards morning.

At 3:30 A.M., April 24th, the larger vessels of the enemy were observed to be in motion and, as we had presumed, took up the positions indicated by the small flags planted the previous evening.

The enemy evidently anticipated a strong demonstration to be made against him with fire-barges. Finding upon his approach, however, that no such demonstration was made, and that the only resistance offered to his passage was the expected fire of the forts (the broken and scattered raft was by then no obstacle) I am satisfied that he was suddenly inspired to run the gauntlet at all hazards, although this was not a part of his original design. Be this as it may, a rapid rush was made by him, in columns of twos in echelon so as not to interfere with each other's broadsides. The mortar fire was furiously increased upon Fort Jackson, and in dashing by, each of the vessels delivered broadside after broadside of shot, shell, grape, canister and spherical case, to drive our men from the guns.

Both the officers and men stood up manfully under this galling and fearful hail. The batteries of both forts promptly opened at their longest range, with shot, shell, hot shot and a little grape, and the guns were most gallantly and rapidly fought until the enemy succeeded in getting above and beyond our range.

IN THE DARKNESS on the river and the smoke of the guns scarcely a vessel was visible. In consequence, the gunners had to govern their firing entirely by the flashes of the enemy's guns. I am fully satisfied that the enemy's dash was successful mainly because of the cover of darkness, since a frigate and several gunboats were forced to retire as day was breaking. Similar results had attended every previous attempt made by the enemy to pass or reconnoiter, when we had enough light to fire with accuracy and effect. The passage was of short duration, having been accomplished between 3:30 A.M. and daylight, under a very rapid and heavy pressure of steam.

DEFIANCE, Capt. McCoy, commanding, was the only vessel saved out of our river fleet. Shortly after daylight, *Manassas* was observed drifting down by the forts. She had been abandoned and fired, and was evidently in a sinking condition. *McRae* was considerably cut up in this action by shot and grape. *Resolute* was run on shore about a mile above the forts, where she hoisted a white flag, but by the prompt action of *McRae*, she was prevented from falling into the hands of the enemy. She was later wrecked and burned. *Warrior* was run ashore and fired, on the point just above Fort St. Philip.

Nothing was known by us of the movements of *Stoneuall Jackson*, *Governor Moore* or *General Quitman*. The steamers *Mosher*, *Music* and *Belle Algerine*, in charge of the fire-barges, were all destroyed, as was *Star*. The heroic courage displayed by the officers and men at both forts was deserving of a better success, especially after the fortitude they had exhibited through the long tedium of a protracted bombardment—unsurpassed for its terrible accuracy, constancy and fury.

Thirteen of the enemy's vessels out of 23, succeeded

in getting by—USS *Hartford*, *Pensacola*, *Richmond*, *Brooklyn*, *Mississippi*, *Oneida*, *Iroquois*, *Cayuga*, *Wissabickon*, *Sciota*, *Kineo*, *Katabdin* and *Pinola*. In addition to these, and to *Verona* and such other vessels as were sunk, there were six gunboats and one frigate engaged in this action besides the mortar flotilla. Heavy chains were flaked along the sides of most of these vessels as an iron-proof protection.

The vessels which passed all came to anchor at or below quarantine, six miles above the forts, where they remained until about 10:00 A.M. Then, except for two gunboats left at the quarantine as a guard, they all passed slowly up the river.

Shortly after the first fleet got underway, a gunboat from below made her appearance with a flag of truce and verbally demanded the surrender of the forts, in the name of Commander David D. Porter, USN, commanding the mortar flotilla. The demand was rejected and the bombardment was reopened about noon.

On April 25th the enemy made no attack during the day, either from above or below.

PERMISSION WAS GRANTED by the enemy to the Confederate States Steamer *McRae* to proceed to New Orleans under a flag of truce with the wounded. The seriously wounded of both forts were sent on board her and she got off the next morning.

On April 26th a gunboat with a white flag dropped down from the quarantine to escort *McRae* on her mission. She did not again return to the forts. Four of the enemy's steamers were in sight at the quarantine at dawn and a gunboat occasionally showed herself below to reconnoiter. In the direction of Bird Island and back of the salt works, a large steam frigate and an ordinary river steamer appeared in sight, the latter working her way up the bay behind Fort St. Philip, apparently towards the quarantine. During the day CAPT. John K. Mitchell, commanding the C. S. Naval Forces, Lower Mississippi, communicated with the enemy above under a flag of truce and learned that the city had surrendered. The Confederate States steam ram *Mississippi* had been burned by our authorities. The wreck of the floating dock or battery drifted by the forts about 4.00 P.M.

At daylight on April 27th the steamer which had been observed the day before working her way up in the back bays was in view immediately in the rear of Fort St. Philip and near the mouth of the Fort Bayou. A frigate and five other vessels were also in sight toward Bird Island. One of them was seen working her way up the bay. From 10 to 13 launches were visible near the boat back of Fort St. Philip, by means of which troops were being landed at quarantine above us. About noon one of the enemy's gunboats from below made her appearance under a flag of truce, bearing a written demand for the surrender of the forts, signed by Commander Porter.

SO FAR, THROUGHOUT THE ENTIRE bombardment and final action, the spirit of the troops was cheerful, confident and courageous. A reaction set in among them during the lull of the 25th, 26th, and 27th, when there was no other excitement to arouse them than the fatigue duty of repairing our damages, and when the rumor was current that the city had surrendered and was in the hands of the enemy. No reply to my dispatches had been received from the city. The troops were still obedient, but not buoyant and cheerful. I published an order de-



MORTAR MAN — Captain Porter, commanding officer of the mortar fleet, watches the battle from his flagship.

signed to revive their courage and patriotism, but I regret to state that it did not produce the desired effect. Everything remained quiet, however, until midnight, when the garrison at Fort Jackson revolted en masse, seized upon the guard and posterns, reversed the field-pieces commanding the gates and commenced to spike the guns.

In the meantime we were totally ignorant of the condition of affairs in Fort St. Philip. As all of our small boats had been carried away by the mutineers, we could not communicate with that fort until the next morning. Since the next attack upon the forts was likely to be a combined operation by land and water and as Fort St. Philip was the point most threatened, it was self-evident that no reduction could be made in its garrison to strengthen that of Fort Jackson, even if all the men there remained true. With the enemy above and below us there was no chance of destroying the public property, blowing up the forts and escaping with the remaining troops, owing to the nature of the surrounding country.

Under all these humiliating circumstances, there seemed to be but one course open—to await the approach of daylight, communicate with the gunboats of the mortar flotilla below and negotiate for a surrender under the terms which had previously been declined.

On April 28, after a discussion among the officers, a flag of truce was sent down to the Union forces—and a surrender was negotiated.

ACROSS THE RIVER — Fort St. Philip was on the other side of the gantlet that Farragut's ships had to run.



TAFFRAIL TALK

WE HAVE A NEW CHIEF OF NAVAL PERSONNEL this month of February, 1958. We'd like to introduce him to you and to say goodbye for you—and us—to the outgoing Chief.

Assuming the post of Chief of Naval Personnel and Deputy Chief of Naval Operations (for Personnel and Reserve Forces) is Vice Admiral Page Smith, USN. VADM Smith comes to his new billet after having served as Chief of Staff and Aide to the Supreme Allied Commander, Atlantic. He has served in many ships—IDAHO, ARIZONA, NEVADA, FARRAGUT, MARBLEHEAD, STEWART, DUNLAP. His last ship command was the famous fast battleship MISSOURI. He has taught at the Naval Academy. He has commanded a destroyer division and a destroyer squadron. Some of his other posts have included that of being Deputy Comptroller of the Navy; Director of Foreign Military Affairs in the Office of SecDef; Deputy Chinfo; and Navy member of the Joint War Plans Committee of the Joint Chiefs of Staff.



VADM Smith

Among VADM Smith's decorations and medals, which include the Navy Cross, it is noted that he qualified for expert rifle and expert pistol. It was with larger bore weapons, however, that he fought his destroyer, USS *Stewart*, one night just 16 years ago this month. And he and his shipmates were up against still larger guns—they took on a Japanese cruiser.

That, in brief, is your new Chief of Naval Personnel.

Now wearing four stars and taking over as Commander in Chief, U. S. Naval Forces, Eastern Atlantic and Mediterranean (CINCNELM) is Admiral James L. Holloway, Jr., USN. "Mr. Training" of the Navy for the past 20 years; author of the famed "Holloway Plan"; prime mover of scientific and battle readiness training ("We go out ahead of the drawing boards," he said, to explain that Navy training is staying ahead of Navy scientific advances); Admiral Holloway hardly needs an introduction to you, unless you're quite new to the Navy. Always a believer that "a taut ship is a happy ship," Admiral Holloway has been a firm believer in discipline throughout his career. Without discipline you do not have leadership; without leadership, you do not have true command, that is the way the admiral has expressed it. And he has insisted, in every ship and station, that his petty officers exercise leadership. He's a bluejacket's admiral.



ADM Holloway

Admiral Holloway has had a long and distinguished career. He has seen a lot of this Navy. He has confidence in the Navy and in the battle readiness of the Navy. He goes to his new post as CINCNELM with that confidence. We have a hunch that our Allies over there are going to learn about that confidence, too.

So, ALL HANDS says goodbye to "Lord Jim." That's what the midshipmen at the Naval Academy named him—for his courtly manners and scholarly speech.

Look at the top of the masthead on page one. There's a new name there. He's your Chief of Naval Personnel now. And he's our new "publisher." He carries on his predecessor's command to the staff of ALL HANDS: "Keep her so."

The United States Navy

Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us. Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air. Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS the Bureau of Naval Personnel Information Bulletin, with approval of the Bureau of the Budget on 23 June 1955, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau invites requests for additional copies as necessary to comply with the basic directive. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly. The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

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• **AT RIGHT: MEDAL MAN**—Lawrence W. Beckhaus, GM2, USN, is admired by his daughters after receiving Navy and Marine Corps Medal for rescuing a sailor washed overboard from a destroyer in the stormy Atlantic.



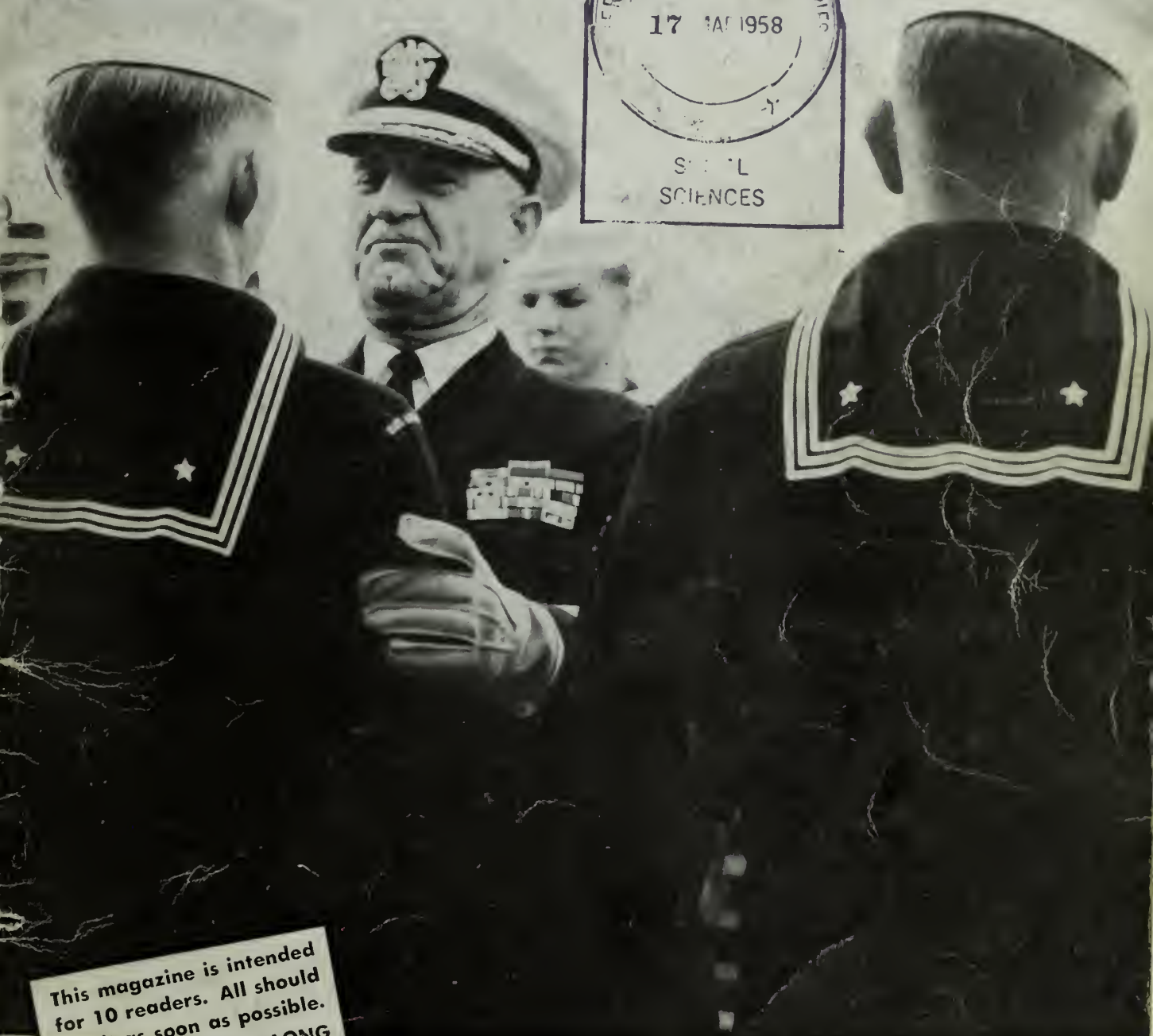
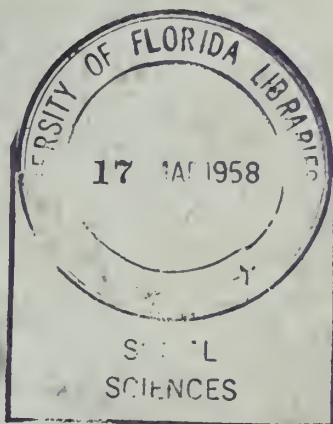
**GOING PLACES
MEETING PEOPLE
the navy way**



ALL HANDS

THE JOURNAL OF NAVAL PERSONNEL INFORMATION BULLETIN

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This magazine is intended
for 10 readers. All should
read it as soon as possible.
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MARCH 1958



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

MARCH 1958

Nav-Pers-O

NUMBER 494

VICE ADMIRAL H. P. SMITH, USN
The Chief of Naval Personnel

REAR ADMIRAL J. R. LEE, USN
The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdell, News

David Rosenberg, Art

Elsa Arthur, Research

French Crawford Smith, Reserve

Don Addor, Layout

• **FRONT COVER: SALTY SKIPPER**—CDR C. L. Foushee, USN, Commanding Officer of USS Luzon (ARG 2) congratulates crew members during personnel inspection. CDR Foushee has 42 Navy years that began as seaman third/class in 1915. (See story, p. 27).

• **AT LEFT: BEARING WITH IT**—Officer candidates G. B. Delaney and (background) H. S. Burns take a bearing during cruise on board Atlantic Fleet greyhound USS Hugh Purvis (DD 709) while making way through waters off Newport, R. I.

• **CREDITS:** All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.



SHIPBOARD IRBM — Artist's conception shows *Polaris* taking off from a submarine for far away target. Missile's solid propellant will take it 1500 miles.

NO DOUBT YOU'VE heard considerable scuttlebutt within recent months about Navy guided missiles and at this point you're more or less confused. Don't worry about it. So many types at various levels of development have been announced that a state of bewilderment is only to be expected.

To help clarify the situation, here's a brief (and unclassified) rundown on what types of missiles the Navy has in the operational, development and planning stages. Bear in mind, however, that progress in this field is so rapid that many an announcement is out of date before it gets into print.

At the moment, five guided missiles—*Sidewinder*, *Petrel*, *Regulus*, *Terrier* and *Sparrow*—are operational.

- *Sidewinder* is the Navy's newest air-to-air guided missile. Named after the desert rattlesnake of the same name, it is guided by an infrared or heat-seeking device, and finds the targets by homing on the

heat emitted from the aircraft.

Sidewinder is an inexpensive, reliable weapon measuring nine feet in length and weighing about 155 pounds. It is designed for destroying high-performance enemy fighters and bombers from sea level to altitudes of over 50,000 feet. The missile, which has very few moving parts and no more electronic components than an ordinary radio, requires no specialized technical training to handle and assemble.

This is the job which is now the primary guided missile weapon used by squadrons in the Sixth Fleet and the Seventh Fleet. It is basically a defensive weapon to increase protection of our men and ships at sea from attacks by enemy aircraft. It permits defending fighters to knock down the fastest enemy aircraft even when it is miles away.

It will also be used in the air defense of the continental United States by the Air Force and Navy.

- *Petrel* is an air-to-surface

weapon 24 feet long, with a wing span of 13 feet and weighs 3800 pounds. It is powered by a turbojet engine and uses radar homing for guidance.

Although it has been operational within the Fleet, it is out of production and turned over to the reserve Fleet.

- *Regulus* is the first operational attack missile to join the Fleet.

Regulus I is a surface-to-surface missile resembling a conventional sweptwing jet fighter about 30 feet long. Its range is in the 500-mile class, and it travels more than 700 miles per hour. Capable of carrying a nuclear warhead, it is powered by a turbojet engine, and is guided by an electronic "brain." Its efficiency was demonstrated last year when

Meet the

uss *Helena* (CA 75) fired a missile at a small island 270 miles away and scored a direct hit.

Regulus launching equipment can be installed in a relatively short period of time on several types of vessels at relatively low cost, with only slight modification to the ship itself.

Ships which can fire this missile include the cruisers uss *Macon* (CA 132), *Helena* (CA 75), *Toledo* (CA 133) and *Los Angeles* (CA 135); the submarines *Tunny* (SSG 282) and *Barbero* (SSG 317) and the aircraft carriers *Randolph* (CVA 15), *Hancock* (CVA 19), *Forrestal* (CVA 59), *Saratoga* (CVA 602), *Lake Champlain* (CVS 39), *Franklin D. Roosevelt* (CVA 42), *Lexington* (CVA 16), *Bennington* (CVA 20), *Bon Homme Richard* (CVA 31) and *Shangri La* (CVA 38).

The uncompleted conventionally-powered submarines uss *Grayback* (SS 574) and *Growler* (SS 577) and the uncompleted nuclear-powered *Halibut*, SSG(N) 587, will also fire *Regulus* missiles.

The missile also can be fired from Navy shore installations. Space and weight compensation are to be reserved in the cruisers in the 1958 ship conversion program for inclusion of *Regulus II* in case there is future need for the missile (see page 8).

Tactically, the missile's main use is against land-based targets but it also can be used against ships.

Regulus II is almost an entirely different missile. It is 57 feet long, and its wingspan is 20 feet. It is capable of traveling better than Mach 2, has an altitude of more than 60,000 feet and a range of more than 1000 miles.

It is capable of carrying a nuclear warhead and is designed for launching from submarines or surface ships. It is guided by either the command system or the inertial navigation system with an assist.

Under the command system, used in test and training flights, the missile can be directed by either ground control or arial control from a piloted aircraft. Under its inertial navigation system, the missile can guide itself to target without outside control, by use of a system of ac-



BULL'S EYE BOUND — F11F-1 *Tiger* goes aloft armed with deadly *Sidewinder* missiles. Using infrared or heat seeking device missile finds own way to target.

Navy's Missile Family

celerometers and gyro scopes. In addition, it can check its own position from specific landmarks close to its target and correct its course accordingly.

Regulus II is an aerodynamic missile, not a ballistic missile. It is con-

tinuously powered and guided all the way from its launching site to target. Ballistic missiles are powered only a portion of their flight. They are "aimed," then follow a trajectory, like a shell, in free flight.

• *Terrier* is an all-weather surface-

to-air missile. Designed to intercept enemy aircraft at longer range and higher altitudes than conventional antiaircraft guns, the 15-foot weapon weighs about one and one-half tons and has a range of about 10 miles.

It is now in use on the guided missile cruisers *uss Boston* (CAG 1) and *Canberra* (CAG 2) and the guided missile destroyer *Gyatt* (DDG 1). In addition, the following ships under conversion or construction will use *Terrier*: the aircraft carriers *Kitty Hawk* (CVA 63) and *Constellation* (CVA 64); the cruisers *Topeka* (CLG 8) *Providence* (CLG 6), *Springfield* (CLG 7); the nuclear cruiser *Long Beach* CG(N) 9; and the frigates *Farragut* (DLG 6), *Luce* (DLG 7), *MacDonough* (DLG 8), *Coontz* (DLG 9), *King* (DLG 10), *Mahan* (DLG 11) and *Dewey* (DLG 7).

Shipboard *Terriers* are selected automatically from the magazine and loaded on the launcher, which is then automatically trained, elevated and fired. The entire operation takes only seconds. Radar then guides *Terrier* to the target.

• *Sparrow* is an air-to-air missile which became operational in the Fleet in the spring of 1956. *Sparrow I* is 12 feet long, weighs 300 pounds, and has a speed of over 1500 miles per hour. It is powered by a solid-propellant rocket motor. After being fired (either singly or in rapid sequenec salvos), it is

PLANE KILLER — *USS Gyatt* (DDG 1) blasts away with *Terrier* at airborne target. Future guided missile destroyers will be armed with smaller *Tartar* missile.





BIG BROTHER of *Regulus I*: Needle-nosed Number Two is almost an entirely different missile. *Regulus II* with speed over Mach 2 is guided to the target.

BULLPUP is an air-to-surface missile used against such ground targets as pill boxes, tanks, and bridges.

guided to a target by a beam transmitted by the launching aircraft's radar. It does not have nuclear capability. It is useful against high- and low-altitude jet bombers and fighters.

Sparrow I is now being phased out of production, *Sparrow II* was an

experimental missile and not intended for Fleet use, and *Sparrow III* is the one with which you will become most familiar. The new model is still 12 feet long, weighs 50 pounds more than its predecessor, and is rated at the same speed. Navy fighters can carry two to four *Sparrow IIIs*.

• **Talos** is a supersonic surface-to-air missile which becomes operational in the Fleet when conversion of *Galveston* is completed this spring. In addition, *uss Little Rock* (CLG 4) and *Oklahoma City* (CLG 5) are being converted for *Talos* use and the Army's Continental Air Defense has accepted the missile for its use.

Talos is powered by a ramjet

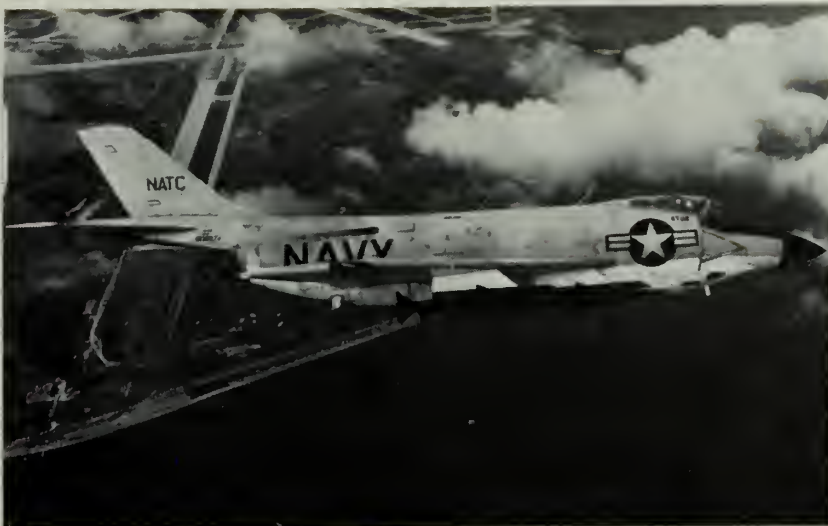
40,000 horsepower engine, weighs about 3000 pounds and is about 20 feet long and 30 inches in diameter. It can destroy enemy aircraft at extremely high altitudes and has a range of over 25 miles. The missile is guided to the target by a mechanical brain within the weapon and when it is within lethal range, a proximity fuse detonates the warhead.

It can carry either high-explosive or nuclear warheads, can destroy supersonic and subsonic targets and is effective against enemy planes using air-to-surface missiles. It can also be used against ships and shore bombardment targets.

• **Tartar**, a junior version of the

THIRD BIRD — *Sparrow III* is checked out in wing launchers of Navy jet fighter. Right: *Sparrow I* blasts target.





FIRST OUT — Sparrow I will be replaced by Number III. Right: Talos, surface-to-air guided missile will be found on board USS Galveston (CLG 3) shortly.

Terrier, is a surface-to-air missile designed especially for use aboard destroyers. It is small enough to go into destroyers and the secondary batteries of large ships, yet has more performance than the original *Terrier*. A solid-propellant rocket, it will be installed in the guided missile destroyers (DDG 2 through 9) which are now under construction.

- **Polaris** is the Navy's shipboard Intermediate Range Ballistic Missile, now well along in its development. Smaller and lighter than the United States' other IRBMs, it is designed especially for shipboard use. Using a solid-propellant fuel, its range is about 1500 miles.

Polaris' tactical mission will be to beat down fixed-base air and missile

defenses and pave the way for carrier strikes aimed at destroying mobile or concealed primary targets.

- **Triton** was a surface-to-surface missile which was cancelled late last year. However, many of *Triton's* more desirable features may be incorporated into future missiles.

- **Bullpup** is an air-to-surface tactical guided missile designed for use by carrier-based Navy aircraft and shore-based Marine planes. It is 11 feet long, weighs 540 pounds and is relatively inexpensive, accurate and simple in design. It is intended for use against comparatively small targets—pillboxes, tanks, truck convoys, bridges, railroads and yards.

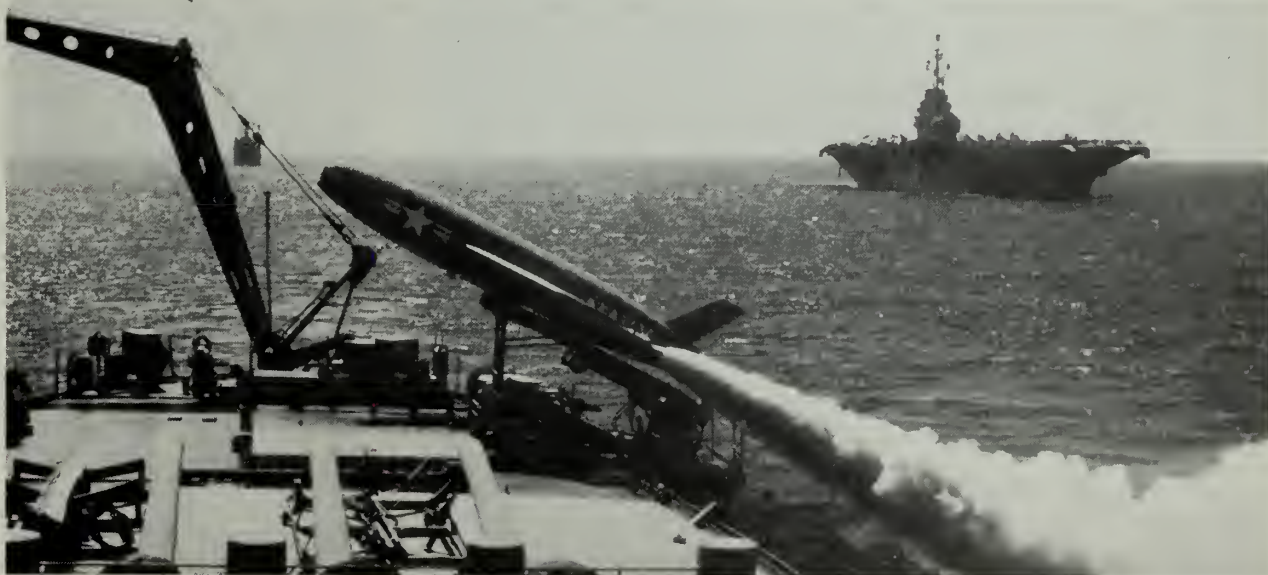
- **Corvus**—For more on this brand new guided missile turn to page 64.



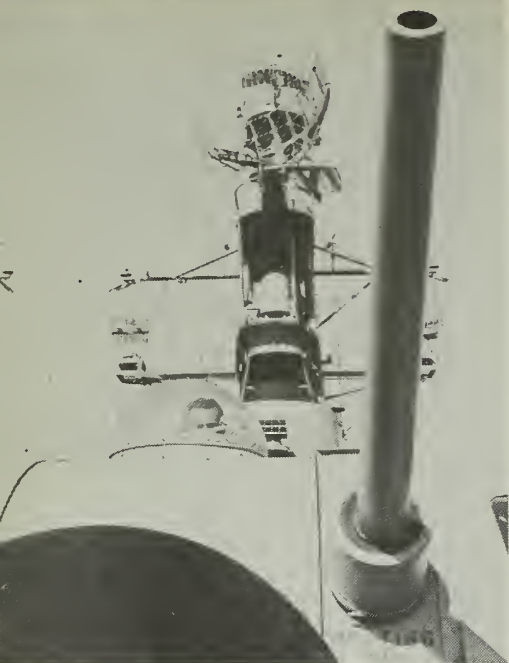
GONE — Air-to-surface guided missile Petrel (below) is out of production and turned over to reserve Fleet.



REGULUS I, Navy's versatile surface-to-surface missile, is fired from many ships including cruisers, carriers and subs.



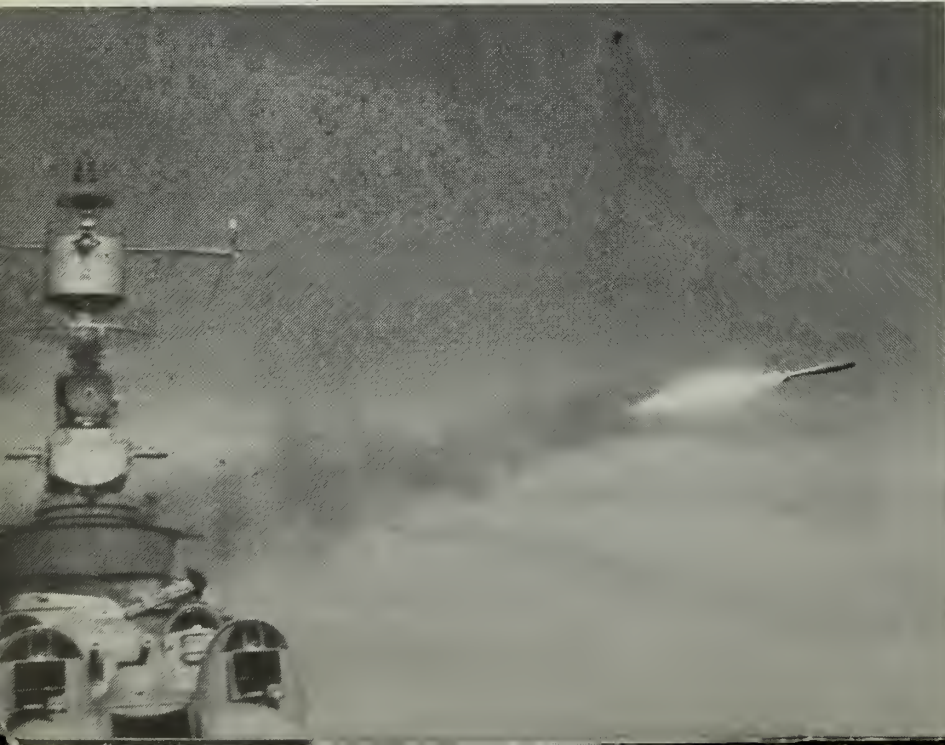
Navy Arsenal Packs



GUN HO — Guns like this one have place in missile Navy. Below: Acoustic torpedo already has a successor.



OFF IT GOES — Weapon Able, a long-range antisubmarine rocket has been with Fleet several years. Carries heavy pay load of conventional explosives.



ALTHOUGH THE GUIDED missile is now in service on board many Navy vessels, other forms of ordnance, such as *guns, torpedoes, mines, depth charges* and *bombs* will continue to be important for many years to come. It has been estimated, for example, that at least 90 per cent of the Navy's guns will still be in service until 1962.

The 5-inch 38-caliber gun of World War II is still considered an accurate and reliable weapon against aircraft and surface targets. Since World War II, the 5-inch 54-caliber, the 3-inch 50-caliber and the 3-inch 70-caliber guns have been installed in certain ships. All are rapid-firing, double-purpose guns.

Although the gun cannot match the missile's potential for defense against high-speed, high-altitude aircraft, it is expected to remain an extremely valuable weapon for other purposes. The currently installed gun weapon systems are considered to be highly effective for defense within their respective envelopes of fire.

Since these weapons are going to be with us for some little time, here's a brief informal rundown which will enable the Navyman who isn't an ordnance expert to understand them just a little better.

When referring to guns, "caliber" and "calibers" are two terms which,

together, tell the gun's size. *Caliber* refers to the diameter of the bore (inside of the barrel). *Calibers* is a term that applies to the gun's length. Take a 5-inch 54, for example.

The bore is five inches, the length is five inches times 54, or 270 inches, or 22 and one-half feet. Inconsistently enough, you refer to it as a 5-inch 54, or, as mentioned earlier, 5-inch, 54-caliber (not calibers). Two guns, originally of European design, are designated by the bore diameter in millimeters, that is, the 40mm and the 20mm.

Small arms and machine guns with bores of an inch or less in diameter are designated by caliber alone which is, however, based on the decimal system. A .50 caliber machine gun has a bore one-half (or .50) inch in diameter. Then there's the .45 Colt automatic pistol, the .30 Browning automatic rifle and the .30 M1 rifle.

As you probably know by now, the 16-inch 50 big boys found only in battleships have been limited in their use by the advent of more sophisticated ordnance, in that these batteries are installed in Reserve Fleet battleships for possible use in shore bombardment for close troop support in any future brush wars.

The largest guns you'll find in active service today will be the 8-inch 55 on heavy cruisers. Light cruisers boast 6-inch 47; 5-inch 54 will constitute the main battery on board destroyers and some attack aircraft carriers. The 5-inch 38 will be found on cruisers, destroyers, aircraft carriers, large amphibious ships and auxiliaries. You will find the 3-inch 50 on most all combatant ships and auxiliaries. These are either slow-fire or rapid-fire mounts.

The 3-inch 70 is limited to two destroyers, four frigates and the tactical command ship *Northampton*. The 40mm guns have generally been replaced by 3-inch 50 rapid-fire twins in some destroyers, cruisers, carriers and battleships. At the same time, 20mm guns have been removed from all large combat and auxiliary ships.

Guns are also classified according to the method of loading and firing. Most major caliber batteries are non-automatic; however, in *Salem* class cruisers and *Worcester* light

Punch & Versatility

cruisers we have rapid-fire automatic 8-inch and 6-inch turrets, respectively. The 5-inch 54s in DLs, 931-class destroyers and new carriers are fully automatic rapid-fire guns.

If you're interested, you'll find thick volumes devoted to ordnance: fire control, types of ammunition, powder, projectiles, primers, fuses and handling—all beyond the scope of this discussion. But you can be sure that Navy's ordnance experts are exploring its potentialities in all its forms.

Take the *torpedo* as another example. With only a slight strain, a torpedo might be considered as an underwater guided missile and it, too, has been with us for quite a while. The torpedo may be divided into two types—surface- (and air-) launched and submarine-launched.

The surface Fleet is equipped with acoustic-homing torpedoes capable of tracking and sinking submarines. Because surface vessels must carry much new and heavier equipment, the size and weight of surface-launched torpedoes and their launchers have been greatly reduced since World War II.

The Mark 43, for example, was originally constructed to meet the need for aerial torpedoes, but later was found equally easy to launch from surface ships. It is now operational in the Fleet for both anti-submarine planes and destroyers. It weighs only about one-eighth that of a World War II torpedo.

The Mark 37 torpedo is characteristic of today's weapons. It is an acoustic-homing torpedo and though primarily an antisubmarine weapon, can also be used for defensive purposes. One of its most significant features is its ability to ignore many types of counter-measures.

Emphasis in the development of weapons for submarines shifted during World War II. The enemy submarine, as well as the surface ship, became a primary target. As submarines increase their range and independence of support, they become an ever more powerful force. Technological advances have speeded up the development of new types of mines and have permitted the modernization of older, still-serviceable types.

Submarines are also capable of

launching various types of underwater *mines*. One of these is the bottom mine (Mark 49), which falls to the bottom when launched. It is used in relatively accessible shipping lanes and areas where a large number of mines is required.

The moored mine falls toward the bottom where its anchor allows a measured amount of cable to be reeled out. The Mark 10 and the newer Mark 57 are influence-fired by passing vessels.

There is also a mobile mine used for accurate mining of dangerous and well guarded harbors.

Most of the *depth charges* developed during World War II still meet the needs of today's Navy. However, two are currently under development which will defend harbors and inland waterways with relatively light explosive charges. These are the picket boat depth charge and depth charge Mark 15, Mod 10.

The latter provides the Navy with a safe, hand-launched depth charge for breaking up frogman attacks.

This discussion should not close without a mention of *Weapon Able*, a long-range, antisubmarine rocket which has been in service in the Fleet for several years.

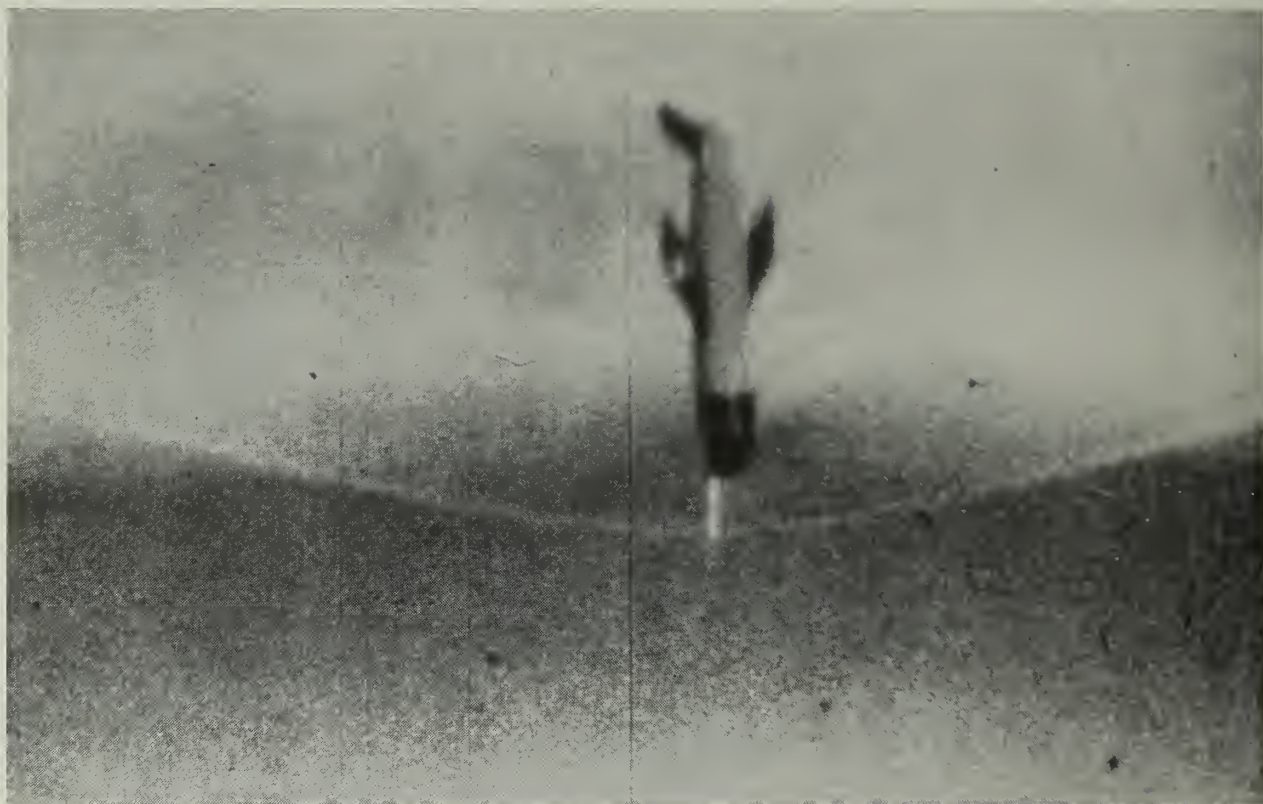
You'll hear more in future issues of ALL HANDS of such items as *Betty*, the atomic depth bomb, and of *Rat*, the rocket-launched homing torpedo.

IT'S A HIT—New lightweight homing torpedo has been developed for surface launching. Here, the torpedo leaves firing tube aboard USS Tweedy (DE 532).



CHUTE THE WORKS — Air-launched mine dropped with new drag chute. Below: Depth charges are still potent.





Greater Production Okayed for Regulus II

An additional contract for approximately \$26.2 million has been awarded for further evaluation and production of the *Regulus II*. Included in the contract are provisions for spare parts and special support equipment estimated at an additional 7.4 million dollars.

Regulus II is the same guided-missile which was fired successfully late in 1957 at Edwards Air Force Base in the first launching with rocket-booster of the new 11-ton 57-foot surface-to-surface weapon. The 1000-mile-plus-range missile, designed to exceed speeds of Mach

2, was fixed under a close approximation of shipboard conditions, making this test a major milestone toward introducing *Regulus II* to the Fleet as successor to *Regulus I*.

Regulus II is destined to go on board submarines such as the Navy's first nuclear-powered missile sub, *USS Halibut*, SSG(N) 587, now under construction, and to fit into the weapons system concept of submarines in both oceans which can rise to the surface and within minutes launch a nuclear warhead missile and submerge immediately, while the missile is guided on to

its target hundreds of miles away.

The first order placed for *Regulus II* missiles was dated December 1956.

★ ★ ★

Traveling at Mach 1.1

"Breaking the sound barrier" has almost become a household expression in the last few years and many people, either in the military service or living near a military air installation have even heard aircraft breaking through this barrier with a terrific explosion. But how many of you have ever seen a picture of a "sound barrier," or a supersonic shock wave, as it is known in technical circles.

Photographs of shock waves have been taken in experimental wind tunnels, but this picture of a *Regulus I* guided missile is believed to be the first ever taken of a shock wave forming in actual flight.

The *Regulus* is shown in a terminal straight-down dive on a target and the wave built up ahead of the missile's nose and its angle indicates a supersonic speed of Mach 1.1. Mach 1 is equal to the speed of sound which means that the missile was traveling well over 700 m.p.h.

UP and AT 'EM — *Regulus II* takes off on test flight that simulated shipboard firing. It will be used by *USS Halibut*, SSG(N) 587, now being built.





Tow Targets for Navy's Supersonic Jets

THE NEW ORDNANCE of today's Navy is only as good as the men behind it. This in turn depends on how well the Navyman has been trained. As weapons and planes become faster and more accurate new training devices must be developed.

Here is the latest version of the old target sleeve used for so many years to train aerial gunners and pilots. This high speed target, called the Delmar Tow Target System, has been given a thorough check out by Fighter Squadron 101 located at Cecil Field, and it was tested operationally at the Naval Air Test Center, Patuxent River, and on board the carriers *uss Forrestal* (CVA 59) and *uss Saratoga* (CVA 60).

The "Grim Reapers" undertook the project of determining for the Navy the problems and their solutions in using this bomb-shaped target for training all-weather intercept tactics in the F4D-1 *Skyray*. The important advantages of Delmar are its speed and ability to be reeled out to any length up to 20,000 feet behind the towing aircraft. A typical towing condition tested by VF 101 with air-to-air radar rocket intercepts

is with the target trailing 10,000 feet behind the tow plane at Mach .85 at an altitude of 40,000 feet.

A special tow rig for the new target was developed within the "Grim Reaper" squadron to fit the F4D-1 *Skyray*. This rig and the target received further operational

tests at sea on board *uss Saratoga* (CVA 60) while she steamed to NATO exercises.

Above: Skyray streaks by with Delmar target. Top (lower): Target is reeled out during evaluation tests. Below right: Close-up view shows bomb-shaped target on F4D-1.



A Thumbnail



TOMORROW—Drawing shows ordnance of future (DLG).

THE MUSHROOM CLOUD of the atomic blast—the streaking vapor trail of a ballistic missile—and the smoky blast-off of a Navy rocket—these are the symbols of power of today's and tomorrow's Navy. They are potent and awe-inspiring symbols that stand for protection of the ocean's freeways, and they pack power-for-peace.

Not so long ago the effectiveness of the Navy gun depended on the impact of the round shot. In the Navy of the future the blast of an atomic warhead from an anti-aircraft missile on a ship standing guard off the U. S. coast could destroy the threat of a formation of planes heading inland. Or a missile moving hundreds of feet beneath the surface of the sea might be the weapon of destruction aimed against an enemy submarine.

These are the weapons the modern day gunner's mate sees in the new Navy. He still works with a wide variety of conventional weapons ranging from the anti-aircraft guns and the 8-inchers of the heavy cruiser to the smaller automatic ordnance, but he sees the 16-inch rifle moving into mothballs with the last of the active battleships. Many of the men who wear the crossed cannons on their arm have already entered the new field of guided missiles and rockets which have opened new horizons for the development of naval weapons.

The missiles and rockets are the latest addition to a list of nautical weapons whose range has grown from a few feet—the distance a man might hurl a flaming grenade—to hundreds of miles.

Perhaps the first piece of naval ordnance was a flaming spear or a club carried by a cave man as he floated down a river on a log or raft thousands of years ago. With this crude instrument he fought off prehistoric monsters or other cave men encroaching on his territory.

However, probably the first recorded chapter of this development story was written with "Greek Fire" by the naval vessels of the Eastern Empire in the 7th century. Engraved on the scorched hulls of enemy ships was the tale of this incendiary liquid made of a blend of sulphur, oil, pitch and other substances.

The so-called gunners of the era poured the flaming Greek Fire from pots on to the hull of the enemy ship,

pumped it through a siphon into the midst of the embattled vessel, tossed makeshift grenades or shot arrows dipped into the burning fluid. Water was no defense against "Greek Fire" so vinegar, wine and sand were used as extinguishing agents.

Greek Fire was the first step forward in the long march of progress to be made by gunpowder-like materials even though the Chinese had used an explosive powder in rockets as early as 3000 B.C. (They were rockets used for celebrations.) It was not however, until the 14th century that the age of cannons arrived. Guns were manufactured in Flanders in 1314 and exported to England and about 1338 the Pot de Fer (See page 00) was developed to hurl stones and arrows.

Gunpowder had become a source of power replacing stretched hide and manpower of bow and catapult.



TODAY guided missiles are active members of Fleet.

The history of the gunner at sea is a sketchy one from 1250 to 1350 A.D., but many battles were fought in the Mediterranean in which cannons were used. In 1350 it is recorded that the navies of Tunis and Seville clashed, with cannons playing a leading role. Soon they were found on all warships.

On the beach, cannonneering was making rapid advances. The "great bombard of Ghent" was built about 1382 by the Flemish who had turned gun making into an art. The Ghent gun had a bore of 25 inches and fired a granite ball weighing 700 pounds. About the end of the 14th century the first rapid fire guns appeared in Germany under the name of "death-organs." Numerous barrels were placed side by side on a wheel mounted carriage. One death-organ of 33 barrels is mentioned in historical works.

Most guns of that era were built up of layers of iron bars and rings welded together, but the bronze cannon began to gain favor. Mohammed II cast some bronze guns in 1453 that equaled the size of the "great bombard" and used them in the attack on Constantinople.

Improvements in iron smelting in the 15th century made possible stronger guns and cast iron shot began

History of Naval Fire Power

to replace the stones used in cannons up to that time although some stone projectiles were still used in the early 19th century. Mortars of three and four caliber barrel lengths (caliber is the diameter of the bore) were used alongside breech loading cannons of 60 calibers.

As fast as advances were made, nautical gunners took advantage of them. At first a large bombard was mounted in the bow of a galley to supplement the ram. Swivel pieces were later installed in other areas to repel boarders and keep order among the slaves manning the oars. In the Atlantic, cannons were installed around the perimeter of the ship to give fire in all directions.

The battle of Lepanto in 1571 saw six large Venetian sailing ships with heavy guns stand off a large Turkish force of galleys carrying light guns. The sailing ships

plan for casting the gun solid and then boring it out. An Englishman founded the science of ballistics with his studies and argued for a short barrel, large bore, rifled cannon. Some decades later a Scottish firm built the "Smasher," an 8-inch rifled cannon firing a 68-pound ball which was ideal for upper deck gun mounts.

Work on gunsights began again and in 1801 it was proposed to Horatio Nelson that gunsights allowing for range be used. He said he would examine them but hoped that he would never be so far from an enemy as to make them necessary in battle. During the war of 1812 American officers devised sights of improved patterns which, along with training, accounted for the superiority of American naval gunnery in the war.

After this war ordnance studies moved ahead, but the people were tired of war and new ideas were slow in being accepted. In 1821, General Henri Paixhans, a French artillery officer, advocated the use of powder-filled shells instead of the solid round shot and the use of single caliber guns aboard ships. His first proposal was not generally adopted until the appearance of *Monitor* in the Civil War and his last idea lay dormant until 1905 when the U. S. Navy accepted the idea of the all-big-gun battleship.

In the period before the Civil War, United States Navy gunners watched developments in Europe. The first large shell guns of the Paixhans design were completed in 1824. For many years mortars had fired thin walled shells, but they were not designed to penetrate as were the Paixhans types.

Percussion locks were fitted to the guns of *USS Vandalia* in 1828, but were not generally adopted until 14 years later. Better gunpowder was developed and gun mounts, locks and sights improved.

YESTERDAY'S naval guns called for close-in tactics.



TERRIER missile is fired from *USS Canberra* (CAG 2).

with heavy guns won the day. Seventeen years later another chapter in the development of naval ordnance was written when the British defeated the Spanish Armada. The English with their heavy guns crushed the Spanish force, spelling the end of the galley-fighting techniques and opening a new era of armed navies controlling the destinies of the world.

Along about this time more attention was placed on the accuracy of the gun. Niccolo Tartaglia devised the "gunners quadrant", a device resembling a carpenter's square with a graduated quadrant secured to it. This was used to determine elevation while simple notches on the barrel were used to assure proper train.

In the 17th century the English Navy boasted of four different types of cannon: the long range culverins, large caliber cannons of battery, stone ball firing petereros, and various types of small pieces. Each came in three different lengths, extra-ordinary (very long), ordinary (medium length) and bastard (very short). Later on this was reduced to a long type (18-25 cal.) and the short (15 cal.) model.

The dawn of the 18th century brought many improvements to naval ordnance. The French devised a





IN WORLD WAR II the rocket became an important weapon for naval aircraft and amphibious vessels.

The adoption of the penetrating shell guns brought about the first armored ship, designed as a defensive measure. In an attempt to find a way to penetrate the armored vessels, ordnance experts took advantage of the elongated projectile now in use and the superior powder and metal being produced, and developed anew the rifled cannon. True, rifling had been used as early as the 14th century, but it was only in 1850 that it became truly practical. In 1854, the French and other European navies adopted the 6.5-inch cast iron rifle.

The use of rifled guns which were hard to load via the muzzle, caused new attention to be turned to developing a breech system. The Wahrendorff design of a sliding-wedge breech block was announced in 1846. Later the French came out with an interrupted screw system patterned after an American invention. Both systems were rendered practicable by the Broadwell ring, invented by an American officer of that name, which prevented the escape of propelling gases.

The new gunpowders and more efficient rifling caused a search for new ways of constructing stronger guns. John Calbraith Dahlgren, termed by many the father of modern gunnery, was among the first to recognize this need. He designed a gun based on the theory that the most strength should be concentrated at the powder chamber end. Consequently his guns with their added

masses of metal surrounding the powder chamber resembled soda pop bottles.

His first guns had 9-inch bores. He went on later to build 11- and 15-inch weapons and experimented with a 20-inch gun. During this period Dahlgren urged the use of rifling on U. S. Navy guns and designed the first practical gun sight.

The smooth bore iron shell gun reached the ultimate point in its development during the Civil War. But in the same war the *Monitor* and *Merrimac* battle caused a revolution in the development of offensive and defensive power which not only marked the end of the traditional smooth bore gun, but is continuing to be felt in our atomic age.

New powder was developed that burned slower than the black powder which had been in use during the first 600 years of firearms. The new materials burned slower but developed more power than the old formulas. To use this powder efficiently it was necessary to build guns ranging up to 35 calibers in barrel length.

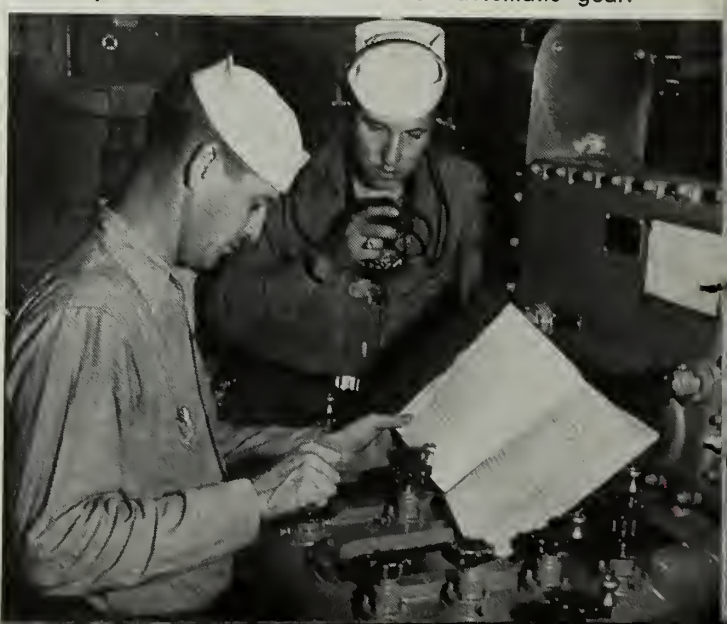
In 1870 Hotchkiss, an American ordnance engineer who established a factory in Paris, began to produce rapid fire guns. His first orders for the one-, three- and six-pound guns came from the U. S. Navy. The breech mechanism of these guns was applied to other weapons up to 4-inch bore, but the breech mechanism for guns with a caliber of 8-inches and more, were still inefficient. For example, in 1884 the average time for loading a 12-inch gun was four minutes. In 1914, it was less than 20 seconds.

It was in the early 20th century that the first center line turrets evolved as the main battery of capital ships. *Monitor* had demonstrated the effectiveness of the spinning turret in the famous battle on Hampton Roads.

With the coming of the standardized main batteries for ships, improvements were registered in range-finding, spotting of hits and fire control equipment, which initiated a rapid extension of battle range. These developments called for bigger guns mounted on bigger ships and by World War II our 45,000-ton battleships carried 16-inch guns and the Japanese *Yamamoto* class were armed with 18-inch weapons, the ultimate gun in size to be mounted afloat to date.

World War I brought with it torpedoes used by submarines and some surface ships. Depth charges were developed to combat the submarines. The famous "Y"

SIGHTING DEVICES had to advance with guns. Left: three-inch-fifty is trained. Rt: FTs work on automatic gear.



guns and depth charge racks of 1917 and 18 helped achieve victory over the first U-boat fleet while the "K" guns of World War II were instrumental in battling the second fleet of U-boats to endanger our control of the seas. Future underseas threats will be met with homing torpedoes, rocket-powered depth charges and hedgehogs and other weapons.

Guns were assigned dual roles in the defense of the ship during World War I. Their barrels not only trained toward the horizon for conventional sea battles, but also aimed skyward to ward off enemy aircraft which began to make their appearance over the Fleet. Giant naval guns even went ashore during World War I where their ability to send a heavy projectile over a long distance was utilized in France. These were 14-inch guns mounted on special railway equipment for mobility.

In 1918 the 16-inch, 50-caliber gun was perfected and placed in use aboard our larger battleships. It remained the principal battleship weapon in World War II. When the war broke out with its aerial threat posed against surface ships, a host of new weapons were made available to the gunner's mate. The 20mm rapid fire cannon and 40mm weapons occupied every square foot of available deck space to provide protection against enemy bombers.

In some cases their barrels were swung on target by the invisible beam of radar while in others the squinting eye of the gunner peering through an open sight brought the gun to bear. Friendly planes ranged over the horizon to spot the effectiveness of the 16-inch guns firing shells (weighing more than one ton) nearly 30 miles.

The end of the war found the rocket and guided missile achieving an importance in naval ordnance which also had grown to include the wide variety of weapons assigned to aircraft.

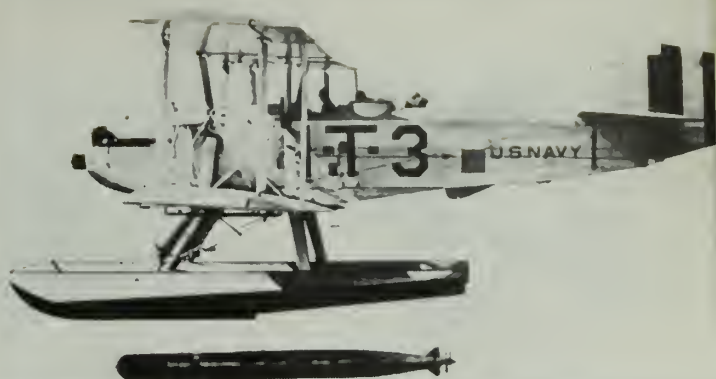
After the war conventional armament moved into a period of rapid fire emphasis. The 3-inch gun with a rate of fire of more than a round a second replaced the 40mm antiaircraft mounts on some ships. Five-inch guns were made semi-automatic along with rapid firing 8-inch guns, but as the speed of sound was approached and exceeded by aircraft the need for high speed missiles became increasingly apparent.

A host of missiles and rockets for various purposes arrived on the scene and the schedule of future arrivals is still heavy. Surface batteries are being replaced by the *Regulus* I and *Regulus* II. Antiaircraft guns are slowly giving way to the *Terrier* and *Talos*. Airplanes in future conflicts may battle one another with *Sparrow* and *Sidewinder* missiles and launch the *Bullpup* against surface and subsurface ships. And the heavy battery of longer range ballistic missiles is just around the corner along with shorter range rockets and guided missiles for surface to surface warfare.

The development of naval gunnery has run in a true circle with the rocket once again achieving the importance that it held centuries ago. In this modern era the Greek Fire is the flaming napalm bomb. The cast iron smooth bore cannons have fallen victim to the rifled main batteries—themselves now being replaced by the guided missile.

This age of atomic energy will give new emphasis to the development of naval ordnance and open even wider horizons than those dreamed of by ordnance experts as they watched an ironclad with a revolving turret steam into battle.

—William Prosser, JOC, USN.



WORLD WAR I and post-war years brought with it the torpedo for ships. Here, torpedo goes airborne in '30s.



ONE AND TWO—Depth charge is dropped in 1918. Below: Rapid firing 40mm guns practice in 1944.



SERVICESCOPE



Matador



Bomarc



Falcon

HAVING TROUBLE KEEPING up with the latest scoop on missiles? You're in good company. Developments are coming so rapidly that we are all confused. For your guidance, here's a brief rundown on what the Army and Air Force are doing.

ARMY

- **Nike-Ajax** is the Army's first supersonic antiaircraft guided missile designed to intercept and destroy the enemy target regardless of evasive action. *Nike* guided missile units are now located around industrial, highly populated and strategic areas of the United States. *Nike-Ajax* is a missile about 20 feet long and about one foot in diameter, with two sets of fins for guidance and steering. It is boosted to supersonic velocity by a solid-propellant booster and maintained by a liquid sustainer motor. The missile and booster weigh more than one ton. Speed, range, altitude and lethality of *Nike-Ajax* can meet an attack from any direction and its kill potential has exceeded expectations.

- **Corporal**, equipped with either an atomic or conventional type warhead, is capable of engaging targets more than 75 miles away. The weapon gives the field commander great firepower on the battlefield and enables him to strike selected targets deep in enemy rear areas. *Corporal* follows a ballistic trajectory during most of its flight. Weather and visibility conditions place no restriction on its use. The propulsion system uses a liquid propellant rocket motor. It travels through space at several times the speed of sound.

- **Sergeant** is one of the Army's newer projects. A ballistic guided missile, it will be the successor to the four-year-old *Corporal*, with improvements over the older weapon's power, range and accuracy. It is unaffected by electronic countermeasures.

- **Redstone** is capable of delivering both atomic and non-atomic projectiles. It is the largest surface-to-surface ballistic guided missile successfully fired in this country. Activation of the first U. S. Army unit to fire the *Redstone* was announced 14 Mar 1956. The Army plans to use surface-to-surface artillery missile units armed with *Redstone* and other Army missiles to extend the range and firepower of artillery cannon.

- **Jupiter** is the Army's intermediate-range ballistic missile which provided the first stage of the rocket that tossed into an orbit the United States' pioneer earth satellite. *Jupiter-C* is about 70 feet long, and carried a satellite payload of about 30 pounds.

- **Lacrosse** is a highly accurate general support field artillery guided missile for use in close tactical support of ground troops. It is an all-weather guided missile which will replace and supplement conventional artillery. Its propulsion system uses a solid propellant rocket motor. The *Lacrosse* system includes the missile, a launcher mounted on a standard Army truck and other ground equipment.

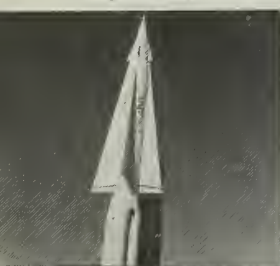
- **Dart** is a guided anti-tank missile, solid-propellant rocket propelled, designed for use by front-line troops. It carries a warhead capable of defeating the heaviest known enemy armor, and delivers this warhead with pinpoint accuracy. *Dart* can be launched by a lightweight launcher from a variety of vehicles.

- **Nike-Hercules** will be the nation's second land-based combat-ready surface-to-air guided missile system to be placed by the Army into the air defense system of the United States. It can engage and destroy at much longer ranges and higher altitudes than *Nike-Ajax* either single, or formations of, aircraft of the present or foreseeable future. The dart-shaped missile itself is 27 feet long; the booster is 14.5 feet long. The atomic warhead is designed to make sure that detonation can only take place at altitudes high enough to prevent damage to our own countryside.

- **Hawk** is the Army's newest air defense weapon capable of carrying a modern warhead and of destroying attackers flying at low altitudes. When placed in service, it will complement the defense against high-level air-attack provided by the Army's *Nike* system. The system is capable of operating both at fixed Army installations and with combat troops in the field. The missile uses a solid fuel propellant and is approximately 17 feet long and 14 inches in diameter.

- **Nike-Zeus** is a surface-to-air missile system under development to provide an anti-missile missile defense against intercontinental ballistic missiles equipped with

Nike-Hercules



Redstone



Talos



Jupiter



Hawk





Rascal



Snark



Thor

atomic warheads that could strike the United States.

- **Talos** Defense Unit, a land-based version of the Navy's *Talos* Shipboard Missile System, was turned over to the Army by the Navy for evaluation.

AIR FORCE

- **Matador** is a tactical missile in the subsonic range (650 mph). It has a wing span of 28.7 feet, a length of 39.6 feet. Ground-launched by a rocket booster from a portable launcher, it is powered by a jet engine and may be controlled electronically in flight by ground personnel. It is capable of delivering conventional or nuclear weapons hundreds of miles. Its operational altitude is above 35,000 feet.

The newest *Matador* development includes a self-contained navigation system.

Five Tactical Missile Groups now employ the *Matador* missile, of which three Groups are deployed in Europe. One unit has been assigned to Taiwan (Formosa).

- **Falcon** (GAR-1, radar guidance) (GAR-2, heat-seeking guidance) is a guided, airborne rocket in the supersonic speed range. It weighs slightly over 100 pounds, is approximately six feet long, and is powered by a solid propellant. It is fired and guided electronically. Designed for internal or under-wing installation, it can be carried in quantity by interceptor aircraft and launched miles from the target. It then "homes" automatically on its objective. During developmental tests, *Falcon* knocked down target planes without use of explosive warheads.

Falcon is now in operational units of the Air Defense Command.

- **Genie** is an air-to-air rocket with atomic warhead developed for air defense purposes.

- **Snark** is a long-range, strategic missile now in production, which will be assigned to the Strategic Air Command's first *Snark* missile unit in FY 1958. This will be the first U. S. intercontinental missile to be placed in operational use. It is designed to carry a nuclear warhead at high speeds and high altitudes against far distant targets by means of a self-contained

guidance system, operating independently of weather, day or night. A *Snark* traveled over a guided course for 5000 miles and was accurately placed on target.

- **Rascal** is an air-to-ground guided missile. It is now in production for the Strategic Air Command's first *Rascal* missile unit, scheduled to be operational during FY 1958. It is 32 feet in length and four feet in diameter. This rocket-powered missile is designed for launching from B-47 Stratojet bombers at high altitude and high speed, and at such distances from the target that bombers and crews are not exposed to local defenses. In recent tests in New Mexico, four direct hits were scored on the target. The first *Rascal* has been delivered to Strategic Air Command.

- **Bomarc** is a long-range surface-to-air guided missile designed for air defense to engage and destroy the enemy far from his intended target. *Bomarc* is approximately 47 feet long with a wing span of about 18 feet. The missile weighs about 15,000 pounds. It is rocket-launched from a vertical position after which it cruises on twin ramjet engines at supersonic speed to its distant target. *Bomarc's* capability extends to extreme altitude. It is guided by electronic systems. *Bomarc* has been successfully tested in a series of launchings against high-flying drone aircraft far out over the Atlantic Ocean. It scored a "kill" more than 100 miles away after attacking it from above 60,000 feet. *Bomarc* will be assigned to the Air Defense Command where it will be used to defend large areas.

- **Thor**, Intermediate Range Ballistic Missile (IRBM). The inertial guidance systems are completely self-contained within the missile and cannot be jammed or deterred from a preset course. The *Thor* has been test fired successfully.

- **Atlas and Titan**—Intercontinental Ballistic Missiles (ICBM). *Atlas* is launched by rocket engines developing many tons of thrust and millions of horsepower within seconds, which impart speeds well above 10,000 miles per hour. *Atlas* is being tested at four facilities.

- **Wizard**, anti-missile missile for defense against intercontinental ballistic missiles. Under development.

Lacrosse



Dart



Nike-Ajax



Corporal



LETTERS TO THE EDITOR

Homeward Bound Pennant for Crew

SIR: The USS *Chimon* (AKS 31) returned to San Francisco, Calif., on 22 Dec 1957 after a six-year tour of duty as supply station ship in Sasebo, Japan.

Before our departure from Japan the crew purchased a printed silk homeward bound pennant and a rubber stamp with the ship's name on it. The stamp also pictured Mt. Fuji and the Golden Gate Bridge.

After our arrival the pennant was cut up and stamped with the ships name and then distributed to the crew.—H.A.M., QMC, USN.

• *Konnichi wa.*

Welcome home, USS *Chimon*. Your tours of duty on a foreign station are reminiscent of those assigned to ships in the "old, old Navy" and your flying of a homeward bound pennant when you passed through the Golden Gate is a tradition passed down from the Fleets of yesterday.

For the younger members of our audience a homeward bound pennant is traditionally flown by a Navy ship returning home from foreign waters after an absence of more than one year. The pennant has a blue field at the hoist with the remaining portion divided horizontally into a red and white stripe.

The blue field carries the stars that represent the length of time the ship has been gone. One star is for the first year. An additional star is added for each six months after that. *Shimon* rated 11 stars in the blue field according to the formula set forth in "U. S. Naval Flags and Pennants Descriptions, Uses and Customs" (DNC 27).

The length of the pennant is governed by the number of officers and men in the ship who have been on duty out-

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Naval Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to: Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

side the United States in excess of one year. Each rates a foot of pennant. Some ships have returned to the states with pennants so long that they were supported by gas-filled balloons or other methods.

When the pennant is divided, the blue field normally is given to the skipper of the ship and the remainder divided into equal portions for the crew.

Sayonara.—ED.

Auxiliary Tug Takes on the ATFs

SIR: PacFlt ships have always been noted for miles steamed—because of the vast expanse of the "Peaceful Sea" and the distance between ports.

Two ships in particular—USS *Quapaw* (ATF 110) and *Mataco* (ATF 86)—have been filling the pages of ALL HANDS by taking bows on behalf of the Pacific sea-goers. *Quapaw* bragged about steaming 19,666 miles in 1956 and *Mataco* boasted of traveling 24,092 miles in the same year.

These records are good and the men should be proud. But, I'd like to remind the PacFlt sailors that we have a two-ocean Navy, and East Coast ships also do a lot of steaming of their own. Permit me to mention my own ship's record. She is USS *Penobscot* (ATA 188)—not a big, luxurious and comfortable ATF, yet in the first 11 months of 1957 she steamed 26,970 miles. This includes a trip across the Equator, which is quite a novelty for an Atlantic tug.

Furthermore, we have a good ship and an alert, sharp and proud crew, plus the curiosity to ask: "Can any other ATA top us?"—R. L. Weinrich, QMC, USN.

• Right now, we wouldn't know whether or not your claim can be topped. However, we do know it would be almost impossible to match the finesse and diplomacy you used in your letter while cutting the big tugs down to size. It would be nice if all the other claims we receive were as skillfully presented as yours.—ED.

Three Questions—Three Answers

SIR: Could you provide me with information on (1) how assignments are made to special weapons training; (2) how it's possible to get Photographic Interpretation School; and (3) the scoop on transfers for humanitarian or hardship reasons.—C.C.M., EMC, USN.

• Taking these in the order in which you asked, here are your answers:

You can find all the answers covering the provisions for assignment to special weapons training in BuPers Inst. 1306.46A. Since you have indicated an interest in this type of duty, you should indicate this preference on your Shoreway data rotation card and, if you desire, request assignment from the Chief of Naval Personnel (Attn: Pers B-21211), via your CO.

Information concerning Photographic Interpretation School is contained in the Catalog of U.S. Naval Training Activities and Courses, NavPers 91769-C, page 26. Personnel of all ratings, second class and above, are eligible but they must have a combined GCT and ARI test score of 110 and be physically qualified.

Normal transfers for humanitarian or hardship reasons are for a four-month period. For further information on this type of transfer, you should check BuPers Inst. 1306.24A. The step-by-step procedures to be followed in preparing a request of this nature are outlined in paragraphs 6(a), (b) and (c). Upon completion of humanitarian assignment, you would be reported available to the appropriate type commander for assignment. Again, under normal circumstances, you would not be returned to the same command in which you served before you were issued humanitarian shore duty.—ED.

Cost-of-Living Allowances

SIR: How come some overseas areas are entitled to cost-of-living allowances while others are not. Just how are such allowances determined, and by whom?—W.V.C., LTJG, USN.

• A cost of living allowance is granted for areas where the cost of living is too high to be supported by regular pay and allowances. They are determined by the Per Diem, Travel and Transportation Allowance Committee based on cost of living reports submitted by overseas activities, in accordance with Appendix C of the Joint Travel Regs.—ED.

Photographic Intelligenceman

SIR: I'm interested in this new rate of Photographic Intelligenceman. Can you pass along any information on who is going to be eligible and what the qualifications will be?—R.E.R., QM1, USN.

• Right now, there isn't too much information on hand to pass along. We do know that the first examinations will be conducted in August 1958. But, as to who will be eligible and what the qualifications are, you'll have to wait along with the rest of us for the instruction to come out.—ED.

Did Cimarron Have a Load On?

SIR: A friend of mine claims that he witnessed the old *uss Saratoga* (CV 3) take on the full amount of cargo (oil, gasoline, etc.) of *uss Cimarron* (AO 22). I claim this couldn't be so. Can you settle this for me?—J.A.W., ADC, USN.

• We'll do our best. The fuel oil capacity of *Saratoga* was 9374 tons and, since the ship's cargo capacity of *Cimarron* is considerably in excess of this, it would not have been possible for *Saratoga* to have taken on the entire fuel load of *Cimarron*.

However, if at the time of the refueling, *Cimarron* had less than 9374 tons in her tanks and providing the black gang of *Saratoga* called over to "Give us all you have," it would have been possible for *Saratoga* to take *Cimarron's* then entire amount of fuel. All clear?—Ed.

Figures on Heavenly Body

SIR: I have a suggestion you may want to pass on to your Taffrail readers.

According to the equation given on page 64 of your December issue, I find that a velocity of only 9.9×10^{-9} miles per hour is required to maintain a 22-pound satellite in an orbit 300 miles above the earth. It strikes me that this is slow enough for the heavenly body to meet itself coming in the opposite direction.

However, if your mathematician friend who gave you the equation had written it as:

$$\frac{mv^2}{r} = \frac{G mM}{r^2}$$

we would have come closer to the 18,000 miles per hour actually required. Try it and see for yourself.—LT H. W. Kellar, USNR.

• Why don't you two fellows fight it out with abaci at πr^2 paces? We'll hold your slide rules for you.—Ed.

Satellite Equation

SIR: In the December 1957 issue of ALL HANDS, your equation on satellites in Taffrail Talk (p. 64) literally cried for a solution so we have tried to see what we could do with it.

While it took a bit of shuffling around and looking up various weight and distance conversions, we eventually arrived at what we conclude to be the right answer—that is, to the equation you presented.

We do, however, find it a bit difficult to believe that an earth satellite can successfully orbit the earth at a distance of -3059.000029499 miles from the surface of the earth; i.e., approximately .00007050 miles, or 11.36 centimeters above earth's center.

We believe that at least one part of the given parts is in error and that is where you say "G" equals the gravi-

tational constant which is given as 6.67×10^{-8} . We aren't experts in matters of this sort so we can't be sure that, assuming the equation is correct, any of the given values are right.

All this leaves us at loose ends, so we hope you can clear up the matter.—E. L. Henning, ET3; D. J. Humphries, ET3, *uss Steinaker* (DDR 863).

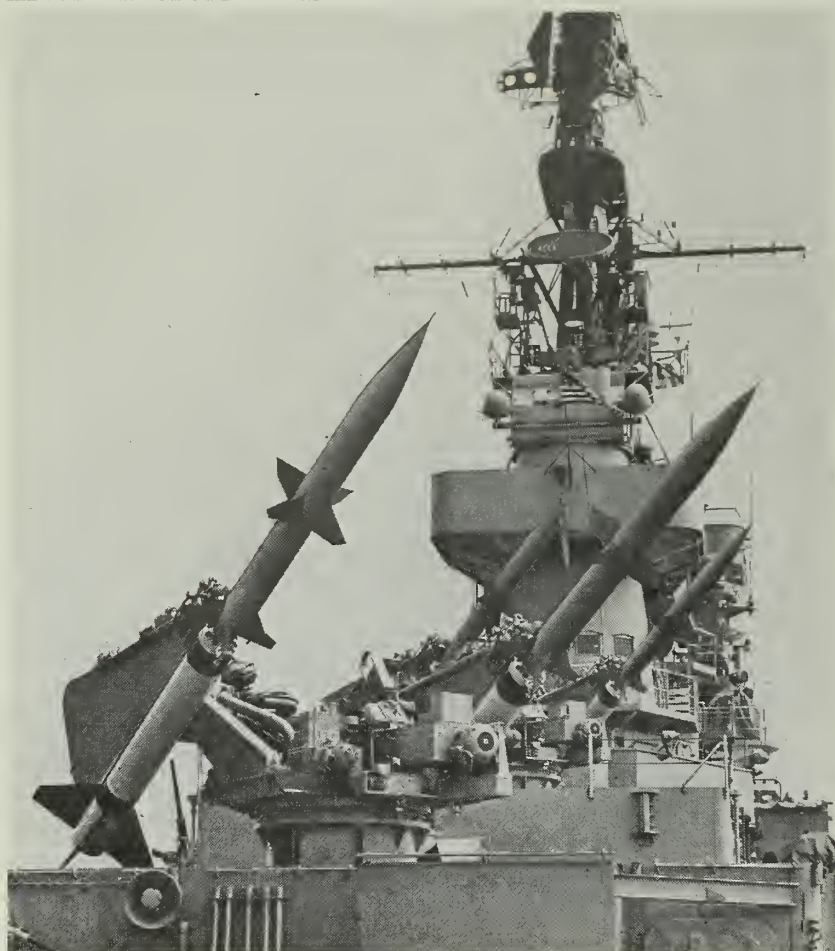
• Science certainly can do wonderful things, can't it?

However, on the assumption that you may have buried your satellite so deeply because of a misplaced decimal point or so, we are forwarding your comments to the lads who passed the equation on to us. We'll let you know how we make out.—Ed.



SHOOTING THE WORKS — Chiefs C. L. Frazier, AOC, USN, and F. B. Vocke, ADC, USN, (shown below) practice firing on the reduced scale rapid fire pistol range at Naval Air Test Center Rifle and Pistol Club, Patuxent River, Md. The two were responsible for the design and construction of the range.





TERRIER TWINS — Double-barreled trouble for enemy planes rest in the launchers bearing Terrier surface to air guided missiles now with the Fleet.

Questions on Seavey

SIR: I would appreciate comments on the following situation as it applies to me under the Seavey program:

I reported to sea duty on 28 Sep 1956 and on 15 Jun 1957 rotation data cards were received by my rating segment. I did not receive a card since my sea duty had not been completed. Cards for my segment will again be issued in June 1958, three months after the completion of my sea duty. Three months later the Bureau will start issuing orders. Allowing for three months advance notice, it would be a total of nine months after completion of my current tour of sea duty before I could expect to start ashore.

Or, upon completion of the prescribed 18 month sea duty required for my rate, the rotation data card will be sent to my commanding officer, returned and within three months I could expect advance orders, providing of course there is a billet available, there is no operational data entered on my card, and I have the required obligated service.

The Seavey instruction may state in black and white which of these cases

is the correct one, but I don't seem to interpret it correctly.—R. H. B., AKC, USN.

• *Let's get one point straight. There is no longer a specific sea tour as such. It will vary from year to year, according to the needs of the service. The number of eligible people placed on Seavey will equal the number required to fill the shore duty requirements during the next year and this number will vary. There is no use placing names*

Annual Review of Service Record

SIR: Many thanks for the explanation of the *Manual of Navy Enlisted Classifications* (NavPers 15105A) which you ran in the February issue of *ALL HANDS*. However, I believe that there is one error in the article where it is mentioned that the service record should be "revised" annually on 1 September, etc. I believe the word should be "reviewed." Am I correct?—E.R.K., YNC, USN.

• *Uh huh, yup, you're right, Chief. And thanks.—Ed.*

on the list in excess of the expected vacancies.

Under the Seavey the Navy has developed a plan 18 months into the future. If you have the obligated service and are on the Seavey you know the 12-month period when you will go ashore. You will receive advanced planning information three to four months before transfer as to which district you will be ordered to.

The cut-off month and year for each rate means all who have been on sea duty from that date or earlier are on the Seavey. They will go during the following 12-month period, but the exact month depends on the vacancies occurring in the area of their preference and their priority.

As you can see from this explanation, the first case you stated would be the correct one. You first must meet the cut-off date requirement for your rate. In the following June (or some other month depending upon which segment you are in) a rotation data card will be forwarded to you and during the next year you can expect to receive your advance orders to shore duty.

This flexibility is necessary to place the maximum number of personnel ashore in the areas of their preference, but it is based on the law of "supply and demand."

One of the conditions of the old shore duty system that Seavey avoids, is the possibility of being bumped down the waiting list. Selection from the shore duty eligibility list was a day-to-day operation. One day you could be first, but on the next you might be No. 50 because 49 people of your rate who had been perfectly happy at sea for long periods of time decided to marry, met a girl, or for some other reason submitted their request and you were bumped. Many people waited a considerable period of time on this list for vacancies ashore because there was no definite plan.

Seavey gives you a plan and once you meet the requirements you know that you will receive your orders ashore during the next 12-month period after you receive your data card.—Ed.

Senior Diver in Charge

SIR: I have a question that has been argued many times. Among a group of divers, who should be senior diver in charge?—H.M., Jr., ME1, USN.

• *There should be no argument. In general, the diver who holds the most qualifications for Master Diver, in accordance with Article C-7408, "BuPers Manual," would normally be in charge. But, in all cases, the designation of Senior Diver in Charge rests solely with the commanding officer who, in making his selection, considers diving experience and general leadership abilities of the various diving petty officers.—Ed.*

Allowance on Bonus?

SIR: I have been receiving contradictory answers to my question regarding reenlistment allowances and bonuses. I reenlisted from a warrant status in January 1947 for six years, completed that tour 22 Jan 1953, reenlisted for six additional years and elected to receive the reenlistment allowance. My current enlistment expires 22 Jan 1959. Can I elect to receive the reenlistment allowance for the years 1953-1959 in lieu of the reenlistment bonus?—A.J.H., HMC, usn.

• Since you elected to receive a reenlistment allowance in 1953 under section 207 of the Career Compensation Act of 1949, as amended, you must receive a reenlistment bonus under either Section 207 or Section 208 of the Act at the time of reenlistment in 1959. You may not again elect to receive a reenlistment allowance incident to any reenlistment after your reenlistment of 22 Jan 1953.—ED.

Dungaree Rating Badge

SIR: The dungaree rating badge was, no doubt, designed for maximum convenience. But to my way of thinking, it doesn't seem to be working out.

After several washings, the adhesive fails. The solution to this is to sew it on but this detracts from the convenience factor. The adhesive soaks through the rating badge and discolors



WHO SAYS 13 IS UNLUCKY?—If there was superstition among the crew members of USS Bausell (DD 845), it didn't stop their earning 13 'E' awards.

it. The new badge placed on an older dungaree shirt does not match in color.

Here is my suggestion: authorize the rating badge to be stenciled on by the individual; this stencil (or template) to be carried in Clothing and Small Stores.—L. G. Fordyce, EN1, usn.

• Your criticism of the iron-on rating badge is valid. The stenciling process was considered by the Uniform Board

but rejected in favor of the iron-on badge because the shortcomings of the adhesive-backed material did not show up in the Fleet trial that was conducted.

Your suggestion of stenciling the rating badge on the dungaree shirt has merit. How about submitting the recommendation via the appropriate commands to the Chief of Naval Personnel (Attn: Pers Ba)?—ED.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying The Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four or more months in advance.

• USS Ancon (AGC 4)—The eleventh reunion for World War II crew members will be held on 30-31 May at the Sylvania Hotel, Philadelphia, Pa. For further information, write to Henry R. Spaventa, 6376 Martins Mill Rd., Philadelphia 11, Pa.

• Commanding Officers, Destroyer Escorts, WW II—The ninth annual DE Skippers' reunion will be held at the New York Yacht Club on 24 April. For more details, write to H. V. Richard, 50 Broadway, New York 4, N. Y.

• Eighth Beach Battalion—The third reunion will be held on Labor Day weekend (29 August thru 1 September), in Montreat, N. C. Details are available from Clifford L. Legerton, 263 King St., Charleston, S. C.

• USS Idaho (BB 42)—A reunion will be held in Norfolk, Va., on 24-25 May. For further information, write to David C. Graham, SMC, usn, 614A Chester St., Norfolk 3, Va.

• Naval Indoctrination School, Quonset Point, R. I.—A reunion is scheduled for 21 March at the Drake Hotel, Chicago, Ill. Information is available from the Quonset Reunion Committee, 700 North Michigan Ave., Chicago 11, Ill.

• USS Oklahoma (BB 37)—A reunion for World War I crew members will be held at the Hotel Piccadilly, New York City, on 3 and 4 May. For additional information, write to Edward H. Lutz, 673 Lindley Rd., Glenside, Pa.

• USS Warren (APA 53)—The fifth annual reunion is scheduled for 9, 10 and 11 May at the President Hotel, Atlantic City, N. J. Details are available from Allie Frank, P.O. Box 247, South Orange, N. J.

• USS Yorktown (CV 10)—The 11th annual reunion will be held at the Hotel Roosevelt in New York City on 2 and 4 May. For further information, write to James T. Bryan, Jr., 67 Wall St., New York, N. Y.

• USS Abercrombie (DE 343)—Former crew members who served on board during World War II and who are interested in a reunion, with time and place to be decided, may write to Raymond J. Shiel, 26 Whipple Ave., Cranston 9, R. I.

• NAS Gainesville, Ga.—Personnel

who served at NAS Gainesville and who are interested in holding a reunion in August may write to Edward T. Beazley, 636 West Ridgewood, Gainesville, Ga.

• USS Saint Paul (CA 73)—Crew members who served from 1945 to 1949 and who are interested in holding an east coast reunion in September may write to LCDR Robert E. Tyler, usn, 1708 West 48th St., Norfolk 8, Va.

• USS Sanctuary (AH 17)—All former crew members interested in holding a reunion in the fall of 1958 may write to Donald R. Playcer, P.O. Box 393, La Grange, Ga.

• 11th and 12th Grange Battalions—Former members who are interested in holding a reunion in the summer of 1958 may write to CAPT George C. Griffin, usnr, (Ret.), Georgia Tech, Atlanta, Ga.

• 91st Seabees—A reunion is planned for late March or early April. For further information, write to Frank Carragher, 85 West Hill Rd., Colonia, N. J.

• All former crew members of the battleship Texas are invited to attend a reunion 21 April on board the battleship Texas, which is berthed at the San Jacinto Battleground near Houston.

Some Comments on the Mystery of the Disappearance of Conestoga

SIR: I had frequently heard my father tell about *uss Cyclops* and I was quite interested in the story of her disappearance in the August 1957 issue of *ALL HANDS*, and in the further letter by Earl E. Sutton in the November issue.

Chief Sutton also mentioned an "Indian-type tug" which disappeared while towing two 500-ton lighters. I believe this to be *uss Conestoga* (AT 54) and, if memory serves me right, she was lost in 1923. Do you know anything about her?—D. L. Thompson, MSGT, USAF.

SIR: The tug referred to by Chief Sutton was *uss Conestoga* (AT 54). After her disappearance a small boat, Navy, with a black letter, "C" on it, was found. Naturally, this boat was thought to be connected with *Conestoga*, but I have heard that the Bureau plate, giving the serial number and other data, did not gibe with the records on the issue to her.

What the ultimate findings were, concerning this bit of evidence, I don't know, but I do know that I lost a mighty fine shipmate in *Conestoga*—a Chief Boatswain's Mate by the name of Zimmerman. Later, hearing from other tugboat men about the difficulties involved in tows at sea, it's not hard to conjecture what might have happened. In those coaling ship days, the 500-ton barges were large, unwieldy pieces of hamper.

Some of us oldsters like to reminisce about the Navy, way back when, so keep up the work on the old packets. The old yarns can be pretty interesting, but they used to seem more impressive when the teller had the square knot on his sleeve that meant he had served his time as "Apprentice," at nine dollars a month and had enlisted when he was 14 years old.—John J. Wagner, SKGC, USN (Ret), Norfolk, Va.

SIR: I was on board *uss Rainbow* (AS-7) at Pearl Harbor when the call went out for all available ships to put to sea in search of *uss Conestoga*. I believe she's the Indian-type tug referred to in your November issue.—Charles J. O'Connell, Brooklyn, N. Y.

SIR: Earl E. Sutton, who referred to an Indian-type tug in your November

issue, was a BM2 on board either *uss Thrush* or *Gannet* when *Conestoga* disappeared. I know because I was in the same ship with him, and our assignment at the time was the search off the west coast of Mexico. She must be the tug he wrote about.—Robert R. Lawler, LTJG, USN (Ret), Woodland Hills, Calif.

SIR: I believe Chief Sutton is referring to *uss Conestoga*, which disappeared in the Pacific in the early 1920s.—C. H. Lyman, RADM, USN.

SIR: The "Indian-type tug" was *uss Conestoga*, which disappeared in the early '20s. I was in *uss Newport News* returning from the Orient at the time. Several of the men on board lost shipmates in that sinking.

Incidentally, I also knew a lot of the *uss Cyclops* gang, who were lost with that ship in 1918.—C. E. Reynolds, CRM, USN (Ret) (1911-1946)—now Chief of Police of Clarinda, Iowa.

SIR: "The Indian-type tug" was *uss Conestoga*.—J. L. Nimmo, CHBOSN, USN (Ret), Miami, Fla.

SIR: *uss Conestoga* was the "Indian-type tug" Chief Sutton referred to.—John M. Piecuch, CMM, USN (Ret.), Agawam, Mass.

SIR: Mystery, profound and complete, which surrounds the disappearance of ships at sea, continues to capture the imagination and interest of mortal man—hence, my contribution to Letters to the Editor.

The tug Chief Sutton mentioned was *uss Conestoga*, a fleet tug of 617 tons displacement, commanded by Lieutenant E. L. Jones. She had 56 officers and enlisted men on board when she left Mare Island Navy Yard on 25 Mar 1921 for Pearl Harbor, en route to Samoa, with a tow. She never reached Hawaii.

I believe she was named after a tribe of Indians that once lived in Lancaster County, Pa. Indian names for Navy tugs were common following the turn of the century—thus, *uss Sioux* (ATF 75), *Uncas* (YT 110), *Ontario* (ATO 13), *Choctaw* (ATF 70), *Mohawk* (YTL 17) and many other brawny midgets of yesteryear.—Robert R. Myers, EMC, USN (Ret), Long Beach, Calif.

SIR: I am pretty sure that the "Indian-type tug" was *uss Conestoga* and I am positive she was lost in 1921.

I remember the year because during most of it I was on recruiting duty on the Upper Peninsula of Michigan, and it was while I was there that *Conestoga* disappeared. A local boy was one of

her crew.—C. V. Williams, CGM, USN (Ret.).

SIR: I have the answer for you. The name of that tug was *uss Conestoga*.—Osmond McFarlane.

SIR: I think the seagoing tug Chief Sutton had in mind was *uss Conestoga*.—S. V. Boggs, ADC, USN.

SIR: The query in the November *ALL HANDS*, concerning a missing "Indian-type tug" refers to *uss Conestoga*, which sailed from San Francisco on 23 Mar 1921 and was never heard from again.

For what interest it may contain, here is a list of all the Navy's "missing" ships since 1775. It is extracted from the "Ship Losses" section of the *Navy Almanac*, which lists over 850 ships lost due to all causes between 1775 and 1955.

9 Oct 1780—*uss Saratoga*, 18 guns, headed for Delaware Capes while being chased by British *Intrepid* and was never seen again.

8 Aug 1800—*uss Insurgent*, 36 guns, sailed from Norfolk, Va., for the West Indies with a crew of 340 and was never seen again.

20 Aug 1800—*uss Pickering*, 14 guns, sailed from New Castle, Del., for Guadalupe with a crew of 90—never seen again.

20 Jun 1805—*Gunboat No. 7* sailed from New York, N. Y., bound for the Mediterranean—disappeared.

9 Oct 1814—On this date a boarding party from *uss Wasp* spoke the Swedish brig, *Adonis*. Some time after that *Wasp* and her crew of 140 vanished at sea.

14 Jul 1815—On this date *uss Epervier*, a brig, en route from Tripoli to the United States with dispatches from Commodore Decatur, passed Gibraltar bound westward. She was never seen again.

28 Oct 1824—*uss Wild Cat*, with a crew of 14, sailed from Thompson's Island in the West Indies, destination Cuba—disappeared.

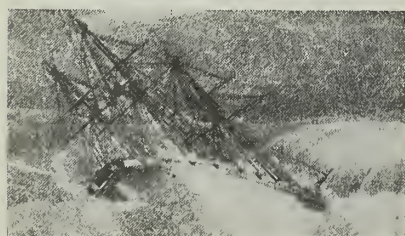
10 Sep 1829—*uss Hornet*, 18 guns, crew of 140, was driven from her anchorage at Tampico, Mex., by a heavy gale. No trace was ever found.

— 1831—*uss Sylph*, 1 gun, sailed (evidently from New Orleans en route to the West Indies) and was

USS Grampus, lost March 1843



USS Hornet, lost September 1829



and Other Navy Ships

never seen again. Navy records give no crew list nor date.

25 Feb 1839—*uss Seagull*, a tender with the Wilkes South Sea expedition, sailed from Orange Harbor in Tierra del Fuego with a crew of 16 and wasn't heard from again.

14 Mar 1843—*uss Grampus*, believed lost in a heavy gale, was last seen on this date off Charleston, S. C.

21 Sep 1854—*uss Porpoise* was last seen on this date by *uss Vincennes* in the Strait of Formosa.

29 Sep 1854—*uss Albany*, with a crew of 193, sailed from Aspinwall, Nicaragua (now Colon, C. Z.) headed for New York and disappeared.

18 Sep 1860—*uss Levant* sailed from Hilo, Sandwich Isles, for Aspinwall, and was never seen again. This was the ship in which Philip Nolan—the fictional "Man Without a Country"—was supposed to have died.

15 Mar 1910—*uss Nina*, a tug, sailed from Norfolk and was never heard from again.

4 Mar 1918—*uss Cyclops* sailed from Barbados, B. W. I., bound for Baltimore, Md. No trace of the ship or her 309 passengers and crew members was ever found.

26 Sep 1918—*usccs Tampa* disappeared in Bristol Channel with her crew of 118. She is believed to have been sunk by the German U-53, but this has never been verified.

23 Mar 1921—*uss Conestoga* sailed from San Francisco (Mare Island) and was never heard from again.

Incidentally, this will be your last official communication from me as Head of ChInfo's Research Section. However, I'm not disappearing without trace—I've just finished 26 and am retiring.—Arnold S. Lott, LCDR, usn.

• Thank you, one and all, especially you, LCDR Lott. Your list should save us a lot of searching the next time we get a letter about a lost ship. This time, though, we really stirred up something.

We had just barely gotten our own copy of the November issue when the letters began to come in. Oddly enough, the first came from Master Sergeant Thompson of the Air Force. Next, we heard from Lieutenant L. M. Wurmund, usn, of the Enlisted Detailing Section (a few offices away), who corrected Thompson's date from 1923 to 1921. After that the dam broke and the flood of letters from the old timers hit us.

However, once we had *Conestoga's* name, the rest was easy—for us. We just turned the problem over to our good friends in Ship's Histories Branch, Naval History Division, and began treading water until they furnished the



MYSTERY TUG—Artist's conception (made from contemporary tugs) shows how *USS Conestoga* (AT 54) might have looked before she disappeared in 1921.

details. Here's what they came up with. Or, if you don't like sentences that end with prepositions—Here's the information up with which they came.

Conestoga—over-all length 170 feet; beam, 29 feet; mean draft, 16 feet; trial speed, 13 knots, and tonnage, 617 gross, 420 net—was built for commercial use in 1904 at Sparrows Point, Md. The Navy bought her on 14 Sep 1917 and armed her with one three-inch 50 cal. gun and two machine guns. Her complement was set at three officers and 35 enlisted men.

For the remainder of World War I, *Conestoga* was assigned to the Submarine Force, performing towing duties along the Atlantic Coast, transporting supplies and guns, escorting convoys from the United States to Bermuda and the Azores and cruising in the Azores area with the American Patrol Detachment.

After the war *Conestoga* was attached to Naval Base 13, Azores, where she towed disabled ships and escorted convoys until September 1919. Following that, she was assigned to harbor tug duty in the Fifth Naval District.

In 1920 *Conestoga* received the seemingly routine orders that were soon to make her a mystery ship. Assigned duty as station ship at Tutuila, Samoa,

she underwent alterations and fitting out at Norfolk, Va., then departed Hampton Roads on 18 November, bound for the Pacific, via Guantanamo Bay and Panama. On 7 Jan 1921 she reached San Diego, Calif., and on 17 Feb she proceeded to Mare Island Navy Yard—her last port of call on a voyage into nothingness. Her next stop, en route to Samoa, was to have been Pearl Harbor, but she was never heard from again after she left Mare Island on 25 Mar 1921.

Despite a search by all available ships and planes which covered a period of several months, only one possible trace of *Conestoga* and her four officers and 52 enlisted men was discovered. A lifeboat with the letter C on the bow was located by ss Senator in latitude 18°15' N., longitude 115°42' W., on 17 May 1921. The letter was removed from the boat by the crew of the merchant vessel, who then destroyed the boat. The letter was subsequently sent to the Navy Department.

It is more than likely that the lifeboat belonged to *Conestoga*, but this couldn't be proved conclusively because of the destruction of the boat. No survivors and no other wreckage were found, although the ocean and all the islands in the vicinity—the Islas de Revillagigedo, south of Baja California—were thoroughly searched.

Conestoga, together with her crew was declared lost as of 20 June 1921.

Along with *Saratoga*, *Insurgent*, *Pickering*, *Wasp*, *Epervier*, *Levant* and all the others mentioned in LCDR Lott's letter, she has joined the mystery fleet.

Did she capsize? Did one of her bows spring a leak and drag her under?

You figure it out—if you can.—E.D.

USS Cyclops, lost March 1918





GOING UP — Photograph of huge wave was taken in North Atlantic during gale in 1945 from bridge of USS Thornhill (DE 195) 40 feet above water line.

Stormy Weather

SIR: Your interesting article on hurricanes and the photos of heavy weather at sea in the November issue reminded me of the enclosed picture. This was not taken in a hurricane, but in a North Atlantic gale in February 1945. The wind was from the northwest, blowing out of a clear sky. I believe the wave shown was the highest I have ever seen. I took the photo with a box camera from the flying bridge of the USS Thornhill (DE 195) which was in the trough of the sea at the time. Since the flying bridge was 40 feet above

the water line, the top of the enormous crest, which blocks off the horizon, must have been even higher.

DEs are noted for their seaworthiness and we rose to this wave like a duck with plenty of heavy spray coming over the flying bridge. We fell into the next trough with a shudder as if we had struck a reef. After several days of this the forward bottom plates were dished in and had to be straightened during our next yard period.—H. H. Leich, LCDR, USNR.

• The North Atlantic has always been known to seagoing men as a

vicious mistress which can spawn some of the worst storms possible. In many ways they are as deadly as the hurricanes of southern latitudes. We appreciate your thoughtfulness in sending the picture of the giant wave.

However, a note of caution to all contributors. Pictures of heavy seas should be covered and labeled "Danger, Heavy Weather Photo." Two of our staff are recovering from a North Atlantic gale. One suffered the usual "mal de mer" when he ventured to sea on a destroyer while the other admits to a certain uncomfortable feeling experienced in a submarine rolling up to 50 degrees. Pictures of this type still have a certain disturbing effect on them.—Ed.

Sea Duty for Regulars, Reserves

SIR: I am a Naval Reservist currently serving on two years of active duty. When I began this tour I was told that Reservists on a two-year tour of active duty would serve 12 months at sea and then 12 months ashore. I was immediately sent to sea and have since been looking for an instruction or notice pertaining to this so-called 12-month sea/shore program for Reserves.

I would appreciate if you would let me know if there is any such instruction and if so, what's the scoop?—W.D.S., SN, USNR.

• Sorry, but you have had the course. By now, you should have your sea legs and be a veteran of many mail buoy watches. If not, be assured, you still have many months at sea ahead of you.

BuPers Inst. 1306.21C which concerns sea/shore rotation of enlisted personnel, applies to Reservists as well as to Regular Navy personnel on active duty. Happy Sailing!—Ed.

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ALL ASHORE—USS *Evans* (DE 1023) rests at anchor in Acapulco's harbor.

Anchoring at Acapulco

IT'S A FORTUNATE CREW that can boast of a famous vacation resort as the destination for their ship's first cruise.

This was the good luck of the Navymen on board *uss Evans* (DE 1023) who spent a week at the luxurious beach of Acapulco while taking their San Diego-based ship on her shakedown cruise.

On liberty most of the Navymen made their first stop at the bank's money exchange counter to change their dollars into pesos. Then they went out to see what this tropical city had to offer.

Some went to the beaches, while others wandered in and out of the many little shops. Those who visited the town during the mid-afternoon found it nearly deserted. Acapulco was in the midst of its daily siesta. During this three-hour period all

stores close and all activities cease. The destroyermen found this a good way to beat the heat as they joined the townspeople in the shady parks or one of the cafes that stayed open. At four p.m. the town springs back to life with the shops staying open until eight.

Activities enjoyed by the relaxing Navymen included day and night swimming, fishing with boats for hire coming right to the ship, glass-bottom boat rides and skin diving.

While the men of *Evans* were ashore enjoying the Mexican hospitality, the ship lowered her gangplank and invited the people of Acapulco to an open house.

When it came time to set to sea again it was the conclusion of an activity-loaded week in one of the world's famous vacation spots with round trip fare paid by the Navy.



IN TOWN—Destroyermen enjoy visit to Acapulco church (above) and tour through city's streets and many shops.



SHADY RETREAT—*Evans* sailors relax in shade during siesta time enjoying view overlooking Caleta beach at right.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



TO THE RESCUE—USS *Chanticleer* (ASR 7) stands by to aid submarines in distress. Emblem aft of the hull number is indicative of Submarine Rescue Vessels.

Target Now Talks Back

An electronics device that tells antiaircraft gunners how close their missiles come to the target has been perfected by the Naval Ordnance Laboratory, Silver Springs, Md.

The "miss-distance indicator" indicates the distance in feet by which the missile failed to hit the target aircraft. The system can be applied equally well to rockets, supersonic missiles or conventional artillery shells. The MDI consists of three very high frequency radio units: a tiny transmitter in the missile, a receiver-recorder on board the missile-launching ship and a so-called "transponder," or relay station, inside the target itself.

When the missile is fired, its transmitter signals both the transponder in the target and the receiver on the ship. At the same time the trans-

ponder retransmits to the receiver, on a different wave length, the signal coming in to it from the missile.

The receiver compares the signal from the transponder with the signal coming direct from the missile. The difference between these two signals is recorded by a tracing that shows the distance between missile and target at the point of closest approach. Also shown is the relative speed between missile and target.

The MDI is not intended for combat use. (Enemy aircraft would hardly oblige missile-launching crews by mounting a transponder.) As a training device for gun and missile crews, however, it is expected to be an invaluable aid in improving their aim.

The MDI is now being packaged into a relatively lightweight portable kit for early use by naval units.

First-Line Jet Fighter

The Fleet can hope to see the new F8U-3, the Navy's advanced all-weather jet fighter, some time in 1960. A contract amounting to approximately \$100,000,000 has been awarded for its production.

Engineered to operate at altitudes which a few years ago represented record heights, the new job will have radar and fire control installations which incorporate a number of the most advanced electrical devices being developed. Although its speed is in the range usually associated with purely experimental rocket aircraft, requiring long runways on which to land, the new plane will be able to land on less than 300 feet of aircraft carrier deck.

Designed to be a first-line fighter in a new generation of all-weather Navy aircraft, the interceptor can be launched from a carrier by catapult in a matter of minutes. Its armament will include some of the Navy's newest air-to-air guided missiles.

The new fighter incorporates some of the features of the 1000-mph-plus *Crusader*, now flying with Fleet squadrons on both coasts, but it is of completely re-engineered design.

The *Crusader* won for the Navy its first Thompson Trophy by setting a national speed record of 1015 miles per hour in 1956.

Fighter Flies 1000 MPH, Plus

The Navy's first 1000-mile-an-hour-plus fighter—the F8U1 *Crusader*—is now serving at sea on deployed carriers of both the Atlantic and Pacific Fleets.

The Atlantic Fleet was first to get an operational *Crusader* squadron—VF-32 from Cecil Field, Fla. The same squadron was also the first to receive the Navy's fastest fighter plane. That was back in March 1957.

For the Pacific Fleet the first operational squadron to give the *Crusader* a workout at sea was VF-154 from Moffett Field, Calif.

Both squadrons were deployed aboard carriers for regular Fleet service after the first of the year.

YESTERDAY'S NAVY



On 3 Mar 1837 Congress approved first naval drydocks, one to be constructed at Norfolk, other at Boston. USS *Constellation* left N. Y. with a cargo of food for famine victims in Ireland, 30 Mar 1880. Congressional authorization of four steel ships on 3 Mar 1883 was major step toward development of a modern U. S. Navy. ONI was established by SecNav 23 Mar 1882. On 30-31 Mar 1944 carrier-based planes in Palau area destroyed 18 ships (tankers, cargo ships and tenders), five subchasers and patrol craft and damaged 13 other ships.

Getting Rid of the Boom is Disposaleers' Business

In most lines of work, people are pretty pleased when business is booming. But such is definitely not the case for the five men on the Navy's Explosive Ordnance Disposal Team at Yokosuka, Japan.

They earn their hazardous duty pay by getting rid of old Japanese depth charges, mines, bombs and other types of ordnance ranging from 25mm shells to large bombs which failed to go off when they were used in World War II. Most of this work is performed in the waters of Tokyo Bay or at Far East naval installations where left-over ordnance is discovered.

The officer-in-charge of the team is LTJG Theron R. Van Sicker, USNR, who gives the impression that he isn't very concerned with the risks of his occupation. Actually, though, Mr. Van Sicker, has a healthy regard for the ordnance and its murderous potential. He's not the daredevil type, nor are any of the other men on the team.

The requirements for getting on the team are tough for most men to meet. "First of all," says Mr. Van Sicker, "the men must be interested and they must be volunteers. Then they must be stable and reliable. We work so close together that we have to trust the others on the team as much as we trust ourselves. Of course, the men must have above-average intelligence—since every situation they meet is different—and they must," concluded the expert "be in excellent physical condition."



CHIEF CHECKS out oxygen gear worn by the five-man team during operations to bring up munitions.

TEAM WORK — Navymen of Explosive Ordnance Disposal Team bring up 'souvenir' from bay's bottom.

There is always a possibility that corrosion of safety features, or sudden changes of pressure, will cause an item of ordnance to explode.

About a year ago the team received a report of a depth bomb beneath the Yokosuka Harbormaster's pier. The EOD men investigated and found not one, but 11 bombs, each containing just about 350 pounds of explosives.

Last September the team was called to an old firing range at Yokosuka, where Seabees were clearing ground for a parking lot. They dislodged a live, six-inch shell with their bulldozer. Somehow, it didn't explode, even though the 'dozer hit it hard enough to leave marks on the blade.

After checking around with an electric detector, they found more buried ordnance—25mm and three-inch shells—all live, so they immediately restricted the area.

"Ordnance around that old range has been a nuisance for many years," commented LTJG Van Sicker "Somebody living nearby used a mortar shell as a door-stop. And, after a rain, 25mm shells are often uncovered along the beach."

On land the team locates ordnance with electronic detectors similar to the mine detectors used in World War II, or they find it through the reports of people who happen to spot it.

In the water they use special gear—somewhat like the surface mine detector—which gives out high-frequency sounds when metal is contacted. They then inspect their find to determine what precautions to take in recovering it, work out plans for handling it and then proceed with the disposal.

Besides these detectors, their water equipment consists mainly of a landing craft which has a winch line aft for loading ordnance on board, and assorted types of diving suits and underwater lungs. They are assisted by a floating crane when they come across bombs too heavy for their craft.

Usually, they unload the recovered ordnance far out at sea.

—Eugene Ormsby, JO3, USN



Deep Boat: The Bathyscaphe

Probing down to nearly two miles beneath the surface of the Mediterranean, Navy scientists have completed a series of 26 dives in the Piccard bathyscaphe, *Trieste*, off the coast of Naples in a research program sponsored by the Office of Naval Research.

The bathyscaphe, the creation of Professor Auguste Piccard, is the underwater equivalent of a lighter-than-air craft such as a blimp. It consists of a 50-foot hull, 12 feet in diameter, filled with gasoline to make it buoyant, since gasoline is lighter than water. Beneath this hull is suspended a sphere, 6.5 feet in diameter, constructed of forged "fatigueless" steel. This sphere, which easily holds two men and scientific equipment, is capable of withstanding ocean depths of more than three miles, which is about 20 times as deep as a conventional submarine. This permits the craft to explore about 99 per cent of sea floors in the oceans of the world.

The hull above the sphere is built to withstand the buffeting of surface waves and towing but is not designed to resist deep sea pressure. The craft descends by letting sea water into air chambers in the hull. Entering through holes in the bottom, the sea water, which does not mix with and is heavier than gasoline, maintains an even pressure between the hull and the outside sea. The normal rate of descent is about three knots. Ascent is made by jettisoning iron shot used as ballast. Additional control of the buoyancy is achieved by valving off small portions of gasoline. Some horizontal maneuverability of the bathyscaphe is provided by two battery-powered reversible propellers

mounted on the hull.

The cabin has two portholes with windows made of six-inch thick Plexiglass. Three mercury vapor lamps attached to the sphere are used to light up the ocean depths. *Trieste* is the second bathyscaphe designed by and built by Professor Piccard. The first one, known as the FNRS3, is owned and operated by the French Navy. The name bathyscaphe is combined of two Greek words, "bathy" and "scaphe," meaning "deep boat."

The Office of Naval Research engaged *Trieste* for a broad research program, involving acoustical and biological investigations of ocean depths. The long-range objectives of this program are to explore the ocean environment at great depths and to evaluate the potentialities of the bathyscaphe both as a research tool and as a naval craft, such as a submarine rescue vessel or a deep diving submarine.

In this particular series of dives the emphasis was on the study of the field of sound in the ocean growing out of the Navy's great interest in underwater acoustics in submarine warfare. Investigations of the biology, geology and physics of the ocean depths also were conducted in an attempt to identify sources of ocean sounds, and to determine the sound transmission qualities of the ocean and the bottom.

One puzzling discovery was that at mid-depths the noise level differed significantly from that at higher and lower depths. It also appeared that this noise came from a horizontal rather than a vertical direction.

In addition to acoustical measurements, there were many observations

made of life in the mid-depths and on the bottom. An abundance of life was noted at all depths, including such strange species as fish whose bodies appeared to be covered with white down.

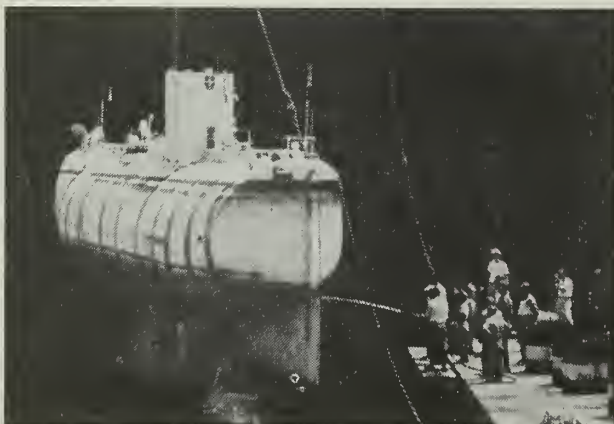
Keeping Tabs on Ocean Waves

The Naval Postgraduate School, Monterey, Calif., now has an instrument for measuring waves (ocean waves that is) as they arrive on the West Coast. It will be used by aerology students learning the techniques through which surf conditions were predicted for the amphibious invasions of WW II.

Called a Shore Wave Recorder, Mark IX, Mod. 5, the instrument is an ingenious device that senses the waves passing overhead but filters out the tides and other slow sea-level changes.

The pressure head of the instrument, placed near the ocean bottom 3000 feet offshore, is able to detect waves passing overhead because water pressure beneath the surface is high when the waves are high and low when the waves are low. Thus, water pressure at the instrument oscillates continually as the successive crests and troughs of individual waves go by above.

Mounted on a five-foot tripod to keep it from being covered by drifting sand, the pressure head consists of a brass cylinder about four inches in diameter and a foot long. In it, pressure variations caused by waves activate an oil-filled rubber bellows. This, in turn, activates a second bellows with a movable arm, which is inside another chamber. The arm sweeps back and forth across an electrical coil to produce varying electrical impulses. These are trans-



BOTTOM BOUND—Bathyscaphe being used by NRL in Med can reach bottom two miles down. Note sphere in photo.

From Seaman To Quartermaster To Warrant Bos'n To Cdr—in 42 Years

The giant British liner *Lusitania* settled into the Atlantic, sunk by a U-boat. Jess Willard lifted the heavyweight crown from the head of Jack Johnson. A young pitcher by the name of Babe Ruth was beginning to make a name for himself with the Boston Red Sox. Woodrow Wilson was in the White House. And, dollar bills were larger both in size and purchasing power.

These were the news stories that were making headlines in 1915, when Clarence Lucius Foushee—despite an admonition that he didn't have what it took to stick it out—joined the Navy as a seaman third class.

Since then—42 years—two World Wars have gone by, and the man who “didn't have what it took” is still around. Now as CDR Foushee, he is CO of *uss Luzon* (ARG 2), a ship where the work is never-ending and morale is sky-high.

During his first enlistment, which began 15 Jul 1915, Seaman Foushee worked his way all the way up through the quartermaster rating, rising to chief quartermaster before the end of his first four years. On this hitch he set his sights on two goals which he was later to attain and pass. The first was to be promoted to warrant officer and the second, to spend 30 years in the Navy.

During the early part of his second enlistment CDR Foushee was stationed on board the destroyer tender *uss Prairie*, when she assisted in the famous 1919 flight of the NCs from Trepassey Bay, Newfoundland, to England via the Azores and Portugal.

On 9 Aug 1924, with his commissioning as warrant boatswain,



FORTY-TWO YEAR Navyman, CDR C. L. Foushee, USN, shows his starting pay of \$17.60 as enlisted man in 1915, to J. Sexton, FN, of ship's crew.

CDR Foushee reached the first of his goals. He surpassed it when he was promoted to chief boatswain in August 1930 and to ensign in November 1941. Shortly after he became an ensign he was ordered to sea as CO of *uss Sagamore* (AT 20), and in that capacity he took part in the salvaging of *uss Wakefield* (AP 21), which had burned 700 miles at sea. This was during the darkest days of World War II, when German submarines threatened to take over the Atlantic Ocean.

When the fleet tug *uss Tawakoni* (ATF 114) was commissioned on 15 Sep 1944 the then LCDR Foushee took command of the brand new ship, and after brief sea trials, steamed for Hawaii and then on to the Marianas.

From there *Tawakoni* headed for what turned out to be one of

the bloodiest battles of World War II—Iwo Jima. With no navigational aids, the ship fought against reefs and shoals, as well as the enemy, throughout the 28-day battle. Most of the time, while helping disabled landing craft off the beaches and sending divers to other ships to clear propellers that were fouled with lines, she worked within machine-gun range of the enemy.

Before World War II was over the commander attained his second goal—30 years in the Navy—but he decided to stick around. He was close to his 35th year of naval service when the Korean war began, and during that war he was Executive Officer of *uss Frontier* (AD 25).

Now, as he nears completion of his 43rd year in the Navy, he's proved pretty conclusively that he “had what it took to stick it out.”

mitted to shore, where a continuous ink trace of the waves is made automatically.

Since wave conditions are determined by the weather, the job of forecasting them is primarily a meteorological one. If adequate daily weather maps of the ocean are available, it is possible to forecast the waves arriving at any location in the open ocean or on any coast as much as five days in advance of their arrival. The technique for doing this

was first developed during World War II when the need to know surf conditions on enemy beaches became vital. It was devised for the Navy by Drs. H. V. Sverdrup and W. H. Munk at Scripps Institution.

The first amphibious landing for which wave forecasts were provided in World War II was the one at Casablanca, North Africa. In the Pacific, wave information was first provided for the assault on Pelelieu, Palau Islands, where the forecasts

were made by ENS W. C. Thompson, now Professor of Oceanography and Aerology at the Postgraduate School.

The school is the only one in the country which offers a regularly given laboratory course in practical wave forecasting. With the wave recorder, students in that course will be able to check the accuracy of their forecasts, and both students and faculty members will be able to use the instrument in research work.

Atlantic Fleet Roundup

HOW ARE WE DOING? From where most of us sit, it's pretty hard to get an over-all picture of the Navy's operations—what it has accomplished during the past year and what it hopes to do in the future.

The complete picture would more than fill this issue of *ALL HANDS*, but here's a situation report of the Atlantic Fleet, in the words of CinCLanFlt ADM Jerauld Wright, USN. As a trend-indicator, it sounds good to us.

During 1957 the U. S. Atlantic Fleet reached its highest state of

ability to meet the varying demands of the "brushfire" incidents of a cold war.

Antisubmarine Warfare

The Atlantic Fleet's number one problem continues to be antisubmarine warfare. To meet this problem, the Fleet tightened up its antisubmarine defense force by establishing in July an Antisubmarine Command in the Atlantic. The new command coordinates all antisubmarine warfare efforts and has the responsibility in the Atlantic of preventing a successful submarine attack against the continental U. S.

The capability of the Atlantic

elements, carried out training exercises under such varying conditions of climate and terrain as the beaches of the Eastern United States, Panama, Puerto Rico and the coast of Turkey.

The simulated employment of atomic weapons for both offensive and defensive forces was incorporated in the amphibious exercises. Operation Snowball, carried out in northern latitudes, tested aircraft carrier equipment, operations and techniques under conditions of extreme cold.

Aircraft Carriers

The Atlantic Fleet's large attack carriers *uss Forrestal* (CVA 59) and *Saratoga* (CVA 60) participated in a wide range of U. S. and allied naval exercises and proved themselves as hard working ships of carrier striking forces.

In October 1957, *uss Ranger* (CVA 61) joined the Atlantic Fleet, increasing to three the *Forrestal*-class aircraft carriers.

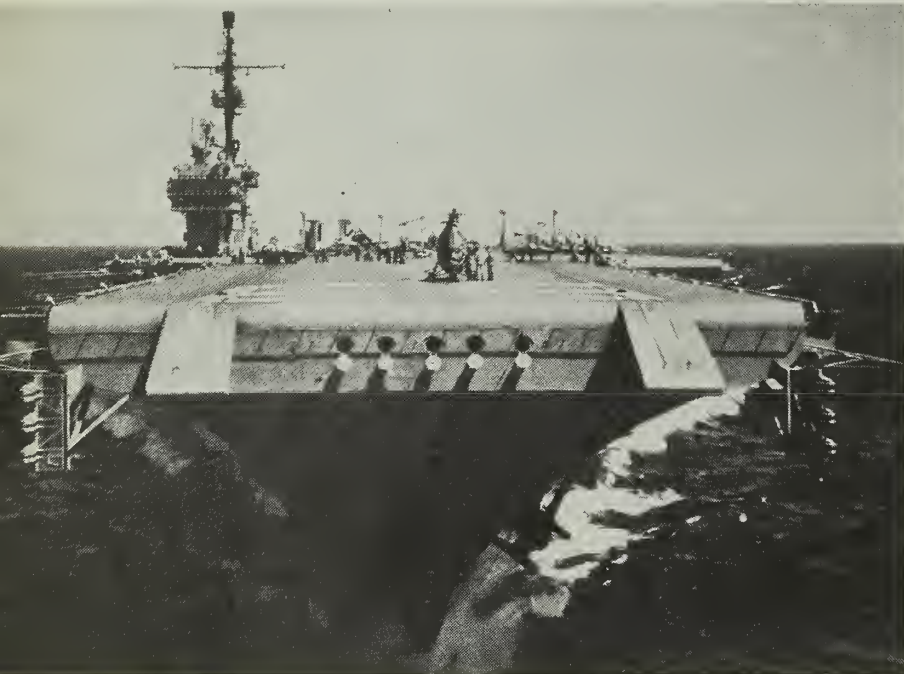
The attack and air defense capabilities of the Atlantic Fleet Naval Air Force were further increased by the addition of two new jet fighters—the *F11F Tigers* and *FSU-I Crusaders*.

During the year, the interchange of aircraft carriers continued between the Atlantic and Pacific Fleets. *uss Wasp* (CVS 18) returned to the Atlantic Fleet in March and *Essex* (CVA 9) returned in August. In March, *Coral Sea* (CVA 43) left Atlantic waters for a modernization overhaul and *Ticonderoga* left in April for duty with the Pacific Fleet.

Submarines

During 1957, the Atlantic Fleet Submarine Force vastly increased its potentialities in the field of submarine and antisubmarine warfare. This was made possible by intensive testing of the nuclear powered submarines *uss Nautilus* SS(N)571, and *Seawolf* SS(N)575, the guided missile submarine *Barbero* SS(G) 317, and the new streamline-hulled *Albacore* (AGSS 569). In March, *Nautilus* refueled after cruising 60,000 miles on its first small charge of uranium. In May, she was assigned for temporary training duty to the Pacific Fleet.

En route from Panama to San Diego she set a new underwater cruising record—3049 miles without surfacing. In October she traveled within 180 miles of the North Pole during a five-and-one-half-day cruise



ATLANTIC FLEET'S large attack carriers *USS Forrestal* (CVA 59) and *Saratoga* (CVA 60) took part in a wide range of U.S. and allied naval exercises in 1957.

readiness since the end of World War II. New ships, new weapons and new operational techniques generated by the nuclear age have greatly increased the Fleet's capabilities, particularly in the offensive aspects of naval warfare.

Contributing factors include:

- A new family of faster naval aircraft.
- Atomic weapon delivery techniques are now basic training for all Fleet aircraft squadrons except utility and transport squadrons.

- Training at all levels in the employment of guided missiles and nuclear and thermonuclear weapons.

The high state of atomic readiness attained by the Fleet has been accomplished without sacrificing its

Fleet to employ atomic depth charges against enemy submarines has been a tremendous advance in ASW.

Fleet Exercises

A comprehensive program of training exercises, reaching all elements of the Fleet, continued during 1957.

These included participation in such combined operations as the NATO fall exercises in which Fleet units worked with the naval forces of U. S. allies. These operations provided major testing grounds to develop strong points, uncover weaknesses, and to improve plans, procedures and techniques.

Atlantic Fleet Amphibious forces, including Navy and Marine Corps



"Row, row, row 'yer boat gentlee down the stream!"

Up-to-date instructions for crediting gratuitous points for Reserve membership.

A list of descriptive grade titles for warrant officers.

Information on policies for granting sick leave to Navymen who are patients in Army and Air Force hospitals.

Amplified instructions for the assignment of enlisted performance evaluations.

Revised regulations covering mustering-out pay.

Up-to-date information on government life insurance.

Information on Social Security benefits.

Instructions on separating individuals with additional obligated service on the grounds of dependency and hardship.

Instructions for notifying the Recruiting Service, district commanders and Chief of Naval Air Reserve Training of the separation of enlisted personnel.

Information on aviation trip insurance.

Information on public liability insurance.

Instructions for the transfer of Reservists with Ready Reserve obligations to the Standby Reserve on the grounds of dependency or hardship.

And four relatively minor pen-and-ink corrections.

• MINNESOTA STATE BONUS — Certain personnel who resided in the State of Minnesota for at least six months before entering the service, and who served on active duty for at least 30 consecutive days between 27 Jun 1950 and 27 Jul 1953, are eligible for a Korean War Bonus.

Career personnel who were on

continuous active duty for a period of four years or more immediately before 27 Jun 1950, however, are not eligible for the bonus.

Personnel who received the Korean Service Medal will be paid at the rate of \$15 a month for each month of foreign service and \$7.50 for each month of domestic service (duty within the continental U.S.). The maximum amount payable to personnel in this category is \$400.

Those who did not receive or become eligible for the Korean Service Medal will receive \$7.50 a month, regardless of whether their service was foreign or domestic, with the maximum bonus being \$200.

Survivors of those who died while on active duty or following discharge are also eligible for the bonus. The full \$400 is payable to the next-of-kin of those killed in action.

The deadline for filing applications for the bonus is 31 Dec 1958. Applications should be sent to the State of Minnesota, Department of Veterans Affairs, Korean Bonus Division, St. Paul 1, Minn. Payments will be made in Jan 1959.

• AO EMERGENCY RATINGS DROPPED — With the disestablishment of the Aviation Ordnanceman U (Utility) and Aviation Ordnanceman T (Turrets) emergency service ratings, the rating of all AOUs and AOTs serving on active duty will be changed to Aviation Ordnanceman (AO).

These changes will be made in equal pay grade, and become effective between 1 Mar and 30 Jun 1958 if you are on active duty. If you're on inactive duty, details will be published later.

Your CO will make sure that you receive the proper Enlisted Classification Code if your rating is changed.

• PRESIDENT'S SAFETY AWARD — The Department of the Navy was presented the President's Safety Award for having the most outstanding record of performance and accomplishments in safety during the year 1956.

The Navy won the award in competition with all government agencies having over 50,000 employees.

Secretary of the Navy Thomas S. Gates received the President's Safety Award during a White House ceremony. Upon receiving it, he relayed congratulations to all hands.

QUIZ AWEIGH

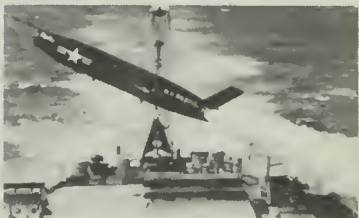
Since ordnance is featured this month, let's take a quick check and see if you can find the target and fire away for a 4.0.

1. The largest gun you'll find aboard a Navy ship in operation today is (a) 16-inch/50 caliber (b) eight-inch/55 cal. (c) six-inch/47 cal.



2. These guns can be found in the main battery aboard a (a) light cruiser (b) heavy cruiser (c) battleship.

3. Many of the Navy's big guns are being replaced by guided missiles. Today, more than 15 ships are capable of firing this one. It's (a) Tartar (b) Regulus I (c) Polaris.



4. This missile is about to be supplemented by a newer version. It will have a range of about (a) 500 miles (b) 1000 miles (c) 1500 miles.

5. Here's an F9F-8 Cougar armed with one of the Navy's most deadly air-to-air missiles. Only nine feet long and weighing about 155 pounds, it is named (a) Sparrow (b) Sidewinder (c) Zuni.



6. This missile, conceived and developed at the Naval Ordnance Test Station at China Lake, Calif., "homes" on its target by (a) sound (b) heat (c) light.

These are but a few weapons of Today's Navy. If you could not distinguish your A's and C's from the B's in this month's quiz, check the answers on page 40 to get your target bearing.

(Telephone) and CES (Shop) at pay grades E-4 and E-5.

- Disestablish the General Service Rating, Driver (CD), in all pay grades. Establish the General Rating of Equipment Operator (EO) at pay grades E-6 and E-7 and the Service Ratings EON (Construction) and EOH (Hauling) at pay grades E-4 and E-5.

- Disestablish the General Service Rating of CM (Mechanic) and the Emergency Service Ratings of CMG (Gasoline Engine Mechanic) and CMD (Diesel Engine Mechanic) at all pay grades levels. Establish the General Rating of Construction Mechanic (CM) at pay grades E-6 and E-7 and the Service Ratings of CMA (Automotive) and CMH (Heavy) at pay grades E-4 and E-5.

- Disestablish the Builder (BU) rating at pay grades E-4 and E-5. Disestablish the Emergency Service Ratings, BUL (Builder, Light), and BUH (Builder, Heavy) in all pay grades. Establish the Service Ratings of BUL, BUH and BUR (Concrete) at pay grades E-4 and E-5.

- Disestablish the SW (Steelworker) rating at pay grades E-4 and E-5 and the SWS (Structural Steelworker) and SWR (Construction Rigger) ratings at all pay grade levels. Establish the Service Ratings of SWE (Erector) and SWF (Fabricator) at pay grades E-4 and E-5.

- Disestablish the rating of Utilities Man (UT) at pay grades E-4 and E-5. Establish the Service Ratings of UTP (Plumber), UTA (Air Conditioning), UTB (Boiler-

ANSWERS TO QUIZ AWEIGH

You should get a b-b-b-b-bang out of this as all the answers this month were under "b."

1. Eight-inch 55 caliber.
2. Heavy cruiser.
3. Regulus I.
4. 1000 miles for Regulus II.
5. Sidewinder.
6. Heat or Infrared.

Quiz Aweigh is on page 37.

man) and UTW (Water and Sanitation) at pay grades E-4 and E-5.

These changes, none of which is anticipated to be effective before 1 Mar 1958, will be officially announced in BuPers Notices of the 1440 series.

As the situation now stands, there are 22 ratings in which no changes are expected. These include QM, SM, MN, NW, GS, OM, CT, MA, DK, SH, JO, MU, MR, BT, BR, IC, PM, ML, SV, AG, AK and HM.

The change-over to the new rating structure will make Naval Enlisted Classification Codes (NECs) even more important than they are at present in the identification of skills not shown by rate designation alone. For that reason, it would be a very good idea to check the Manual of NECs (NavPers 15105A) to make sure your special skills are correctly reflected in your rate plus NEC.

List of New Motion Pictures Available for Distribution To Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in January.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

Helen Morgan Story (1979) (WS): Drama; Ann Blyth, Paul Newman.

Zero Hour (1980): Drama; Dana Andrews, Sterling Hayden.

Joe Dakota (1981) (C): Drama; Jock Mahoney, Luana Patten.

My Gun is Quick (1982): Drama; Robert Bray, Whitney Blake.

Tin Star (1983): Drama; Henry Fonda, Tony Perkins.

Island in the Sun (1984) (C) (WS): Drama; James Mason, Joan Fontaine.

Mr. Rock and Roll (1985): Musical; Alan Freed, Rocky Graziano.

Stowaway Girl (1986): Drama; Trevor Howard, Pedro Armendariz.

Hell Bound (1987): Drama; John Russell, June Blain.

The Prince and the Showgirl (1988) (C): Comedy; Marilyn Monroe, Laurence Olivier.

Bernardine (1989) (C) (WS): Drama; Pat Boone, Terry Moore.

Pickup Alley (1990) (WS): Drama; Victor Mature, Anita Ekberg.

Battle Hell (1991): Drama; Richard Todd, William Hartnell.

Careless Years (1992): Drama; Natalie Trundy, Dean Stockwell.

Jet Pilot (1993) (C): Drama; John Wayne, Janet Leigh.

Will Success Spoil Rock Hunter (1994) (C) (WS): Comedy; Jayne Mansfield, Tony Randall.

Hired Gun (1995) (WS): Drama; Rory Calhoun, Anne Francis.

Gunsight Ridge (1996): Adventure-Drama; Joel McCrea, Mark Stevens.

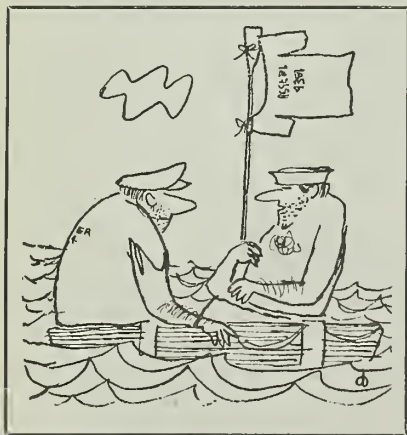
Band of Angels (1997) (C): Drama; Clark Gable, Yvonne De Carlo.

The Joker is Wild (1998): Comedy-Drama; Frank Sinatra, Mitzi Gaynor.

Regular and Reserve Officers Selected for Promotion

The President has approved the recommendations of selection boards for temporary promotion of 1677 Regular Navy and Naval Reserve staff corps officers on active duty.

Numbers of those selected are: lieutenant commander: Medical Service Corps, 56; Supply Corps, 291; Chaplain Corps, 49; Civil Engineer Corps, 77; Dental Corps, 29; Medical Corps, 87; Nurse Corps, 698; lieutenant: Medical Service Corps, 56; Supply Corps, 148; Chaplain Corps, 37; Civil Engineer Corps, 55; Nurse Corps, 92; Dental Corps, 1; Medical Corps, 1.



"This'll be the first time we missed 'Navy Log' since the night the Chief fell off the fantail."

It's Good News for Shorebound Navymen in Seavey Segment II

SEAVEY SEGMENT TWO, which becomes effective on 1 Jun 1958, will result in longer tours of normal shore duty for some of the top grade petty officers in 17 different ratings.

Under Segment Two, CPOs and first class petty officers in the HM and DT ratings will have 42 months of shore duty. Under the outgoing plan they were ordered ashore for periods of three years. Increased to 30-month normal tours are: CSC, ICC, CEC, UTC, SHC, DCC, SDC, ENC, PMC, BUC, MRC, MLC, SWC, CMC, CM1, CDC, CD1 and CD2. Petty officers in these ratings were formerly given only 24 months of shore duty.

The new shore duty tours will apply only to personnel whose current tours expire on or after 1 Jun 1958. Tours for those who have never been to sea will not be increased.

The increases are being made to insure maximum stability in operating units, greatly needed under current conditions, and yet maintain equitable rotation of personnel. However, your tour of shore duty will not be extended to a date beyond your current expiration of enlistment unless you agree to extend. After 15 Feb. 1958 you must have executed the extension agreement at least seven months before your active obligated service ends. After that point the tour completion date cannot be changed.

Personnel in 22 different rates will have received Segment Two rotation data cards about 1 Mar 1958. However, shore duty orders under the old sea-shore rotation plan will continue to be issued until 15 May 1958. At that time the current shore duty waiting list will be cancelled.

If you are serving on overseas shore duty, or in a non-rotated unit and your tour of duty expires later than 16 months after the effective date of your Seavey Segment, you will not receive a rotation data card. Navymen serving on overseas shore duty whose tour expires after 1 Oct 1959 will receive their rotation data cards in March 1959, provided their tour overseas expires before 1 Oct 1960.

According to BuPers Notice 1306 of 8 Jan 1958, which outlines the

new shore duty tours and Seavey Segment Two procedures, rotation data cards were mailed on 15 February for personnel in the following rates whose sea tours began in the month and year shown or earlier:

CSC	Jan 1956
CS1, 2, 3, CS5N	Dec 1955
SHC	Jul 1956
SH1	Apr 1952
SH2, 3, SH5N	Dec 1951
MMC	Mar 1955
MM1, 2, 3, MMFN	May 1953
ENC	Dec 1955
EN1, 2, 3, ENFN	Jun 1954
MRC, 1, 2, 3, MRFN	Sep 1955
BTC	Aug 1955
BT1, 2, 3, BTFN	Apr 1952
BRC	Aug 1955
BR1	Apr 1952
EMC	Jul 1956
EM1	Jun 1956
EM2, 3, EMFN	Jun 1955
PMC	Jun 1956
PM1, 2, 3, PMFN	Mar 1955
MLC	Aug 1956
ML1, 1, 3, MLFN	Nov 1952
SVC, 1, 2, 3, SVCN	Aug 1956
CEC, 1, 2, 3, CECN	Aug 1956
CDC	Aug 1956
CD1, 2, 3, CDCN	Jan 1956
CMC	Aug 1956
CM1, 2, 3	Jul 1956
CMCN	Dec 1954
BUC, 1, 2	Aug 1956
BU3, BUCN	Feb 1956
ICC, 1, 2	Aug 1956
IC3, ICFN	Feb 1956
MEC	Dec 1955
ME1, 2, 3, MEFN	Apr 1954
FPC	May 1955
FP1, 2, 3, FPFN	Mar 1954
DCC	Apr 1956

DC1	Jul 1955
DC2, 3, DCFN	Apr 1955
SWC	Aug 1956
SW1, 2, 3, SWCN	Aug 1955
UTC, 1, 2, 3, UTCN	Aug 1956
SDC	Aug 1956
SD1, 2, 3, TN	Oct 1953

The difference in sea-tour commencement dates is due primarily to the different ratios of shore billets to sea billets in each rate. Every effort is being made by the Bureau of Naval Personnel to maintain a minimum average sea tour at three years in order to provide optimum Fleet stability. Shore tours are being adjusted in six-month increments each year to provide this stability.

All rotation data cards must be returned to the reporting PAMIs. If cards are not received for eligible personnel, the required information should be sent to the PAMI in a typewritten list or on blank cards which are provided. The lack of obligated service does not make a man ineligible for entry on Seavey.

All personnel whose sea tour commencement date is in or before the month indicated above will be entered on the Seavey regardless of whether a rotation data card is returned or not. The PAMIs will inform commands of the duty preferences on file in BuPers.

For a detailed explanation of both the Seavey and Shorevoy programs, see the January 1957 issue of ALL HANDS, pages 28-49.

Just \$700,000 To Go for Memorial Stadium

With \$2,200,000 now on hand for the Memorial Stadium Fund drive, there still remains about \$700,000 to go to reach the goal of \$2,900,000 required to build the stadium, including the plaques and other memorials.

Navymen and Marines afloat and ashore have contributed \$368,000. Since the Sixth and Seventh Fleets are most representative of all types and units, the Memorial Board has agreed to dedicate gates to the memory of Sailors and Marines who have served in the Sixth or Seventh Fleets. Minimum for a gate is \$15,000.

Funds raised by a unit may be

used to dedicate memorial chairs at \$100 per chair, provided that these funds are not also counted in the contribution toward a plaque or other memorial. As an example of ingenuity displayed by fund-raising ships, one unit came up with the idea of holding a drawing among those in the crew who had lost a relative serving in the Navy or Marine Corps during war time. Each winner of the draw would dedicate a memorial chair to his relative.

Ground-breaking ceremonies and official construction on the Stadium started in March. Completion is scheduled for August 1959. Pledges will be accepted through July 1959.

Roundup of Federal Income Tax Information for the Navyman

BY THE TIME YOU READ this the 15 April Federal Income Tax deadline will be about one month away. The W-2 statement of wages paid and taxes withheld will have long since been handed you and by now you should have completed the proper tax return form and mailed it.

If not, you had better work up a full head of steam and settle your debt with Uncle Sam.

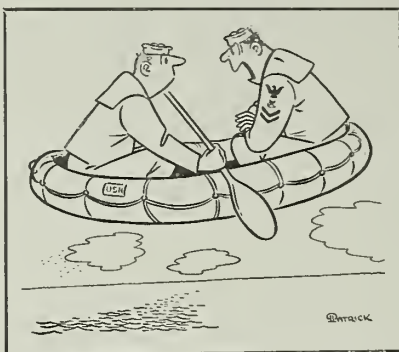
The information contained in this article is designed to smooth the way for preparing your return whether you used the simplified, short Form 1040A or the longer Form 1040. For more complete information refer to a copy of Bu-Sanda's pamphlet *Federal Income Tax Information*, in your Disbursing Office or Legal Assistant's Office.

However, here in brief are the main points you should know to file a correct return. It is followed by a schedule of tax withholdings based on your monthly income and number of exemptions claimed.

• **Address**—Be sure that your complete mailing address is on the return. It is most important that you furnish your name, rank or rating, branch of service, service serial number, and your permanent home address if you have one. If you have none and the ship is your only home, your address must include the name of the ship as well as the number. If you are based at an overseas shore station, your address must include the name of the station and Navy number.

There's a good reason for making sure that you have the correct address on your return. The Fleet Post Office each year has thousands of pieces of mail incorrectly addressed. Many of them contain refund checks, as well as statements, etc. It's just possible that you, for example, the taxpayer who's due for a refund, haven't received your refund check yet because you did not give the right address.

• **Who Must File**—Practically every individual citizen, single or married (including minors), whose gross income is \$600 or more must file. There are certain exceptions based on old age and self-employment; these may be found in Bu-Sanda's pamphlet.



"I kept telling ya, . . . don't overinflate it!"

• **When To File**—Income tax returns based on the calendar year must be filed on or before 15 April. However, if you are living or traveling outside the U. S., the District of Columbia, Alaska or Hawaii, you have until 15 June to file your return (but you will be charged interest on the unpaid tax). In addition, the Director of Internal Revenue for the district in which you normally file your returns may, upon application from you, grant an extension of as much as six months (more if you are abroad).

• **How To Prepare Returns**—Broadly speaking, your income tax is based upon your "gross income" minus "business expenses" and "allowable deductions" (including personal exemptions), multiplied by the tax rates and minus "credits." In other words, certain specified expenses are subtracted from gross income to find "adjusted gross income"; deductions are subtracted from adjusted gross income to find "taxable" income; and the appropriate tax rate is applied to the taxable income to find the amount of tax you owe. Credits for the taxes withheld by your disbursing officer, payments on estimated tax—or for retirement income credit and so forth—are then subtracted from the tax you owe. If the total amount withheld is smaller than the amount you owe, you must pay the difference; if the amount withheld is larger than the amount of your tax—you'll get a refund.

Income That Must Be Reported

• **Gross Income**—This includes gains, profits and income derived from salaries, wages, or compensation for personal service—in short,

money received from almost any source. The following items from naval sources, to the extent that they are not reduced by allowable "business expenses," should be reported as "gross income";

- Active duty pay including incentive and special pay such as "sea pay" and "flight skins."

- Retired pay if retired for other than physical disability resulting from active service.

- Retainer pay of enlisted members transferred to the Fleet Reserve.

- Retired pay of enlisted members transferred to the retired list for other than physical disability resulting from active service.

- Pay of all midshipmen and NavCads, and retainer pay of \$50 and \$100 per month for NROTC and Naval Aviation College Program enrollees.

- Compensation for employment in officers' clubs, messes, station theatres, etc.

- Interest on Navy Savings Deposits and on Armed Forces Leave Bonds or leave payments.

- Lump sum payment received by officers upon honorable discharge or complete separation other than disability severance pay.

- Mileage and per diem received must be reported, but such actual expenses as meals, fares and lodging may be deducted (see below). Mileage and per diem payments are not included on the W-2 form and must be obtained from original orders in your service record or from your pay record.

- Lump-sum readjustments payments to Reservists involuntarily released to inactive duty after five or more years of continuous active duty.

Navy Income That Need Not Be Reported

The following items received from the Navy are excluded from "gross income" and need not be reported:

- Basic allowance for quarters and any amounts paid for quarters, heat and light furnished in kind.

- Basic allowance for subsistence.
- Cost to government for transportation of dependents and household goods.

- Rations furnished in kind to enlisted men.

- Uniform gratuity or clothing

allowance for officer and enlisted.

- Retired pay of persons retired before 1 Oct 1949 for physical disability resulting from active service and who are receiving pay under laws in effect before 1 Oct 1949.

- Disability retirement or severance pay received for separation after 30 Sep 1949 under the Career Compensation Act of 1949.

- Uniforms furnished in kind to enlisted men.

- Death gratuities.

- Personal money allowances received by fleet admirals, admirals and vice admirals.

- Money received by naval attaches for entertaining and exceptional purposes, if expended solely in connection with official duties.

- Mustering out pay.

- State bonus payments for services rendered to the United States.

- Amounts paid to or on behalf of veterans under the WW II and Korean GI Bills.

Deductible Items

Adjusted Gross Income—Deducting any applicable items in the following list from your gross income will give you your "adjusted gross income." The following are deductible items.

- Mess bills afloat—An officer with or without dependents who is assigned permanent duty afloat, may deduct mess bills for any periods during which his ship is away from its home port for longer than an ordinary work day. The same principle applies to air personnel away from a squadron's home base.

- Travel expense—the actual expenses may be deducted if you are traveling in a mileage or per diem status.

- Transportation expenses may be deducted by Reserve personnel if incurred while performing authorized drills under competent orders, even if they do not receive reimbursement for such travel.

- Expenses attributable to rents and royalties are deductible.

- Losses from sale or exchange of business property are deductible items in computing taxable income.

- Deductions from adjusted gross income—Once you have found your adjusted gross income you may make deductions for the following items to which you are entitled. You do this only if you are filing the long

form (Form 1040) in which you itemize your deductions. If you are filing the short Form 1040 or 1040A you will receive a standard and automatic deduction of about 10 percent of the adjusted gross income.

- Contributions paid during the taxable year for exclusive public use (churches, United Givers Fund, Red Cross, Navy Relief, USO, etc.).

- Interest on personal indebtedness, such as mortgage on real estate or, under certain circumstances and to a limited extent, carrying charges on installment purchases of personal property.

- As a general rule, state and local taxes are deductible by the person upon whom they are imposed by law. However, federal excise taxes (luxury taxes), Federal income and certain foreign taxes are not deductible.

- During periods of illness or hospitalization you may (under certain circumstances) be entitled to deduct your pay (up to a total of \$100 weekly). To support a claim for this exclusion, however, you should furnish a statement from the attending physician, the hospital, the employer, or other acceptable evidence of absence, illness, and rate of payment. You may not deduct the first seven calendar days of such a period unless the absence is a result of injury or you are hospitalized at least one day.

- Child care, a deduction limited to \$600, is allowed working women or widowers, as well as men who are legally separated or divorced, for the expense of caring for certain of their dependents in order that the taxpayer may be gainfully employed. A married woman may claim the deduction only if she files a joint return with her husband. Then the \$600 is reduced by the amount of their joint income over \$4500.

- Losses. For example, a loss occasioned by damage to your own automobile is deductible to the extent that it is not covered by insurance, unless it is the result of a willful negligence on your part.

- Miscellaneous deductible items include uniform equipment (insignia of rank, corps, etc.); amount of reenlistment bonus refunded by reason of termination of enlistment; alimony payments, if included in the wife's gross income; dues to profes-

HERE'S YOUR NAVY

The newest of submarine rescue chambers, RC-21, which employs new design concepts of operation, valving, lighting and method of sealing to a sunken submarine, has been delivered to USS Sunbird (ASR 15) for a series of tests.

The purpose of the rescue chamber is to evacuate men from a sunken submarine. It is designed to carry two operators and eight passengers. In an extreme emergency, the number of men carried may be considerably increased. In rescue operations, the rescue chamber is independent of the submarine; all necessary power and assistance for its operation is provided by the rescue ship.

In the rescue chamber design, the motor control, gauges, valves, manifolds and communications systems are arranged to provide the best visibility and operation. The blow and vent manifold has been provided with "distinctive touch" valve handles to enable operation under emergency conditions where lighting might fail.

A quick opening valve seals the RC-21 to a submarine by immediately allowing a "slug" of water from the lower chamber to enter a tank within the rescue chamber. The lights in the



lower chamber are embedded in polyester resin plastic and can withstand full submergence pressure and severe thermal shock. They are placed in a complete circle around the seating ring where light is most needed. Padded seats, seat belts and the guarding of all machinery protect men from injury. The chamber also has a potential for deeper submergence than previous rescue chambers to suit future submarine development.

Communication is provided by use of an AN/BQC sonar system. With this system, contact can be maintained between the sunken submarine, the rescue chamber and the surface ship. A sound-powered telephone is used as a standby system. The wire for the telephone is included in the main power cable.

Table of Withholding Taxes on Navy Pay

To find out your service pay subject to withholding, see story

If your monthly wages subject to withholding are—		And the number of withholding exemptions* claimed is—						
At least	But less than	0	1	2	3	4	5	6
The amount of tax to be withheld will be—								
\$ 0	\$ 56	18% of wages \$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
\$ 56	\$ 60	\$10.40	.40	0	0	0	0	0
\$ 60	\$ 64	11.20	1.20	0	0	0	0	0
\$ 64	\$ 68	11.90	1.90	0	0	0	0	0
\$ 68	\$ 72	12.60	2.60	0	0	0	0	0
\$ 72	\$ 76	13.30	3.30	0	0	0	0	0
\$ 76	\$ 80	14.00	4.00	0	0	0	0	0
\$ 80	\$ 84	14.80	4.80	0	0	0	0	0
\$ 84	\$ 88	15.50	5.50	0	0	0	0	0
\$ 88	\$ 92	16.20	6.20	0	0	0	0	0
\$ 92	\$ 96	16.90	6.90	0	0	0	0	0
\$ 96	\$ 100	17.60	7.60	0	0	0	0	0
\$ 100	\$ 104	18.40	8.40	0	0	0	0	0
\$ 104	\$ 108	19.10	9.10	0	0	0	0	0
\$ 108	\$ 112	19.80	9.80	0	0	0	0	0
\$ 112	\$ 116	20.50	10.50	.50	0	0	0	0
\$ 116	\$ 120	21.20	11.20	1.20	0	0	0	0
\$ 120	\$ 124	22.00	12.00	2.00	0	0	0	0
\$ 124	\$ 128	22.70	12.70	2.70	0	0	0	0
\$ 128	\$ 132	23.40	13.40	3.40	0	0	0	0
\$ 132	\$ 136	24.10	14.10	4.10	0	0	0	0
\$ 136	\$ 140	24.80	14.80	4.80	0	0	0	0
\$ 140	\$ 144	25.60	15.60	5.60	0	0	0	0
\$ 144	\$ 148	26.30	16.30	6.30	0	0	0	0
\$ 148	\$ 152	27.00	17.00	7.00	0	0	0	0
\$ 152	\$ 156	27.70	17.70	7.70	0	0	0	0
\$ 156	\$ 160	28.40	18.40	8.40	0	0	0	0
\$ 160	\$ 164	29.20	19.20	9.20	0	0	0	0
\$ 164	\$ 168	29.90	19.90	9.90	0	0	0	0
\$ 168	\$ 172	30.60	20.60	10.60	.60	0	0	0
\$ 172	\$ 176	31.30	21.30	11.30	1.30	0	0	0
\$ 176	\$ 180	32.00	22.00	12.00	2.00	0	0	0
\$ 180	\$ 184	32.80	22.80	12.80	2.80	0	0	0
\$ 184	\$ 188	33.50	23.50	13.50	3.50	0	0	0
\$ 188	\$ 192	34.20	24.20	14.20	4.20	0	0	0
\$ 192	\$ 196	34.90	24.90	14.90	4.90	0	0	0
\$ 196	\$ 200	35.60	25.60	15.60	5.60	0	0	0
\$ 200	\$ 204	36.40	26.40	16.40	6.40	0	0	0
\$ 204	\$ 208	37.10	27.10	17.10	7.10	0	0	0
\$ 208	\$ 212	37.80	27.80	17.80	7.80	0	0	0
\$ 212	\$ 216	38.50	28.50	18.50	8.50	0	0	0
\$ 216	\$ 220	39.20	29.20	19.20	9.20	0	0	0
\$ 220	\$ 224	40.00	30.00	20.00	10.00	0	0	0
\$ 224	\$ 228	40.70	30.70	20.70	10.70	.70	0	0
\$ 228	\$ 232	41.40	31.40	21.40	11.40	1.40	0	0
\$ 232	\$ 236	42.10	32.10	22.10	12.10	2.10	0	0
\$ 236	\$ 240	42.80	32.80	22.80	12.80	2.80	0	0

To find out your service pay subject to withholding, see story

If your monthly wages subject to withholding are—		And the number of withholding exemptions* claimed is—						
At least	But less than	0	1	2	3	4	5	6
The amount of tax to be withheld will be—								
\$ 240	\$ 248	43.90	33.90	23.90	13.90	3.90	0	0
\$ 248	\$ 256	45.40	35.40	25.40	15.40	5.40	0	0
\$ 256	\$ 264	46.80	36.80	26.80	16.80	6.80	0	0
\$ 264	\$ 272	48.20	38.20	28.20	18.20	8.20	0	0
\$ 272	\$ 280	49.70	39.70	29.70	19.70	9.70	0	0
\$ 280	\$ 288	51.10	41.10	31.10	21.10	11.10	1.10	0
\$ 288	\$ 296	52.60	42.60	32.60	22.60	12.60	2.60	0
\$ 296	\$ 304	54.00	44.00	34.00	24.00	14.00	4.00	0
\$ 304	\$ 312	55.40	45.40	35.40	25.40	15.40	5.40	0
\$ 312	\$ 320	56.90	46.90	36.90	26.90	16.90	6.90	0
\$ 320	\$ 328	58.30	48.30	38.30	28.30	18.30	8.30	0
\$ 328	\$ 336	59.80	49.80	39.80	29.80	19.80	9.80	0
\$ 336	\$ 344	61.20	51.20	41.20	31.20	21.20	11.20	1.20
\$ 344	\$ 352	62.60	52.60	42.60	32.60	22.60	12.60	2.60
\$ 352	\$ 360	64.10	54.10	44.10	34.10	24.10	14.10	4.10
\$ 360	\$ 368	65.50	55.50	45.50	35.50	25.50	15.50	5.50
\$ 368	\$ 376	67.00	57.00	47.00	37.00	27.00	17.00	7.00
\$ 376	\$ 384	68.40	58.40	48.40	38.40	28.40	18.40	8.40
\$ 384	\$ 392	69.80	59.80	49.80	39.80	29.80	19.80	9.80
\$ 392	\$ 400	71.30	61.30	51.30	41.30	31.30	21.30	11.30
\$ 400	\$ 420	73.80	63.80	53.80	43.80	33.80	23.80	13.80
\$ 420	\$ 440	77.40	67.40	57.40	47.40	37.40	27.40	17.40
\$ 440	\$ 460	81.00	71.00	61.00	51.00	41.00	31.00	21.00
\$ 460	\$ 480	84.60	74.60	64.60	54.60	44.60	34.60	24.60
\$ 480	\$ 500	88.20	78.20	68.20	58.20	48.20	38.20	28.20
\$ 500	\$ 520	91.80	81.80	71.80	61.80	51.80	41.80	31.80
\$ 520	\$ 540	95.40	85.40	75.40	65.40	55.40	45.40	35.40
\$ 540	\$ 560	99.00	89.00	79.00	69.00	59.00	49.00	39.00
\$ 560	\$ 580	102.60	92.60	82.60	72.60	62.60	52.60	42.60
\$ 580	\$ 600	106.20	96.20	86.20	76.20	66.20	56.20	46.20
\$ 600	\$ 640	111.60	101.60	91.60	81.60	71.60	61.60	51.60
\$ 640	\$ 680	118.80	108.80	98.80	88.80	78.80	68.80	58.80
\$ 680	\$ 720	126.00	116.00	106.00	96.00	86.00	76.00	66.00
\$ 720	\$ 760	133.20	123.20	113.20	103.20	93.20	83.20	73.20
\$ 760	\$ 800	140.40	130.40	120.40	110.40	100.40	90.40	80.40
\$ 800	\$ 840	147.60	137.60	127.60	117.60	107.60	97.60	87.60
\$ 840	\$ 880	154.80	144.80	134.80	124.80	114.80	104.80	94.80
\$ 880	\$ 920	162.00	152.00	142.00	132.00	122.00	112.00	102.00
\$ 920	\$ 960	169.20	159.20	149.20	139.20	129.20	119.20	109.20
\$ 960	\$1000	176.40	166.40	156.40	146.40	136.40	126.40	116.40

18 per cent of the excess over \$1,000 plus—

\$1000 and over	180.00	170.00	160.00	150.00	140.00	130.00	120.00
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* Exemptions — to find out the number of exemptions to which you are entitled (including exemption for yourself) see story. If you are entitled to more than six exemptions, consult the computing withholding tax table.

sional societies, etc.

Items which are not deductible from your adjusted gross income include: Personal living or family expenses other than the exceptions noted above; cost of moving and shipping household goods; cost of transportation of dependents; premiums paid on life insurance policies; expenses of visiting home while on furlough, leave or liberty; and, amounts paid for U.S. Savings Bonds.

Your Exemptions

Exemptions for you and your dependents are treated as deductions from adjusted gross income in arriving at "taxable income." The amount of exemption allowed for each dependent is \$600 and exemptions are allowed for the following:

- You, the taxpayer.
- Your spouse.
- Each "dependent." You can

claim credit only for persons who meet all of the dependency requirements listed on the instructions accompanying Forms 1040 and 1040A.

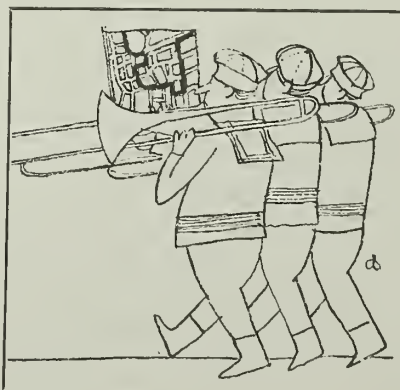
An individual receiving support from two or more persons, none of whom furnishes more than half, may be claimed as a dependent under

certain circumstances. The conditions are listed in the tax instructions.

Citizens of foreign countries will not qualify as dependents unless they are residents of either the U. S., Canada, Mexico, Canal Zone or the Republic of Panama.

A child born or legally adopted in the Philippine Islands before 1 Jan 1956 may be claimed as your dependent if you were a member of the U. S. armed forces at the time the child was born or adopted, and the child is a resident of the Philippine Islands during the taxable year.

A last word of warning! If you have not already filed your return for 1957, get busy. There are penalties (some severe) for not filing and if you do not send in your return you will not collect any refund which may be due you.



You Will Be Interested in This (Tax) News from Back Home

YOU ARE NO DOUBT FAMILIAR with the pamphlet containing federal income tax information published and distributed by the Bureau of Supplies and Accounts. This pamphlet is designed primarily for the use of Navymen on active duty and describes their rights and liabilities under federal income tax laws.

However, certain states, territories and possessions of the United States also have their own income tax laws under which you may have liabilities, in addition to the federal income tax. Below, you will find a summary of the requirements of the local income tax laws, as prepared by BuSanda.

You should note that, unless your state makes a special exception, members of the armed forces are not excused from state and local income taxes merely because they are on active duty.

Generally speaking, if you are a legal resident of a state on the last day of the taxable year, you are liable to the income tax laws of that state, even though you did not actually live there during the entire year. Furthermore, you are usually liable for income taxes to the state in which you live or earn your income, as well as the state in which you are a legal resident. However, Section 514 of the Soldiers' and Sailors' Civil Relief Act of 1940, as amended, provides that a *member of the armed forces, who is a*



"A table near the water, please!"

legal resident of one state but lives in another state ONLY because of his military orders, is not liable to the state in which he is living for income taxes on his service pay. This does NOT apply to retired or retainer pay, or the separate income of any member of your family, or any of your income derived from other sources.

Let's say, for example, that your legal residence is Ohio, but you received orders to Washington, D.C., and have moved to Arlington, Va., with your family. You have no income other than your service pay. Since Ohio has no income tax laws, you are not required to file a return to the state of Ohio and, under the Soldiers' and Sailors' Civil Relief Act, you are not liable for filing a Virginia return. You have no prob-

lems—state income tax problems, that is.

Let's assume, however, that your friend came from Vermont and is on active duty in California. He pays income taxes in Vermont. He buys a house in California, not for the purpose of changing his legal residence, but only for a place to live while on duty in California. He intends to return to Vermont after his tour of active duty. He will be required to continue to file his state return to Vermont and under Section 514, California will not be able to impose an income tax on his service pay, even though he owns real estate in that state. However, if he is transferred from California and decides to rent his house as investment property, he would be liable to file a California return to report the rental income. If he decides to change his legal residence to California, he will then, of course, be subject to California state income tax laws.

Below, you will find a table which shows features of the income tax laws of the state, territorial and insular possessions of the United States. It primarily indicates the income requirements for filing of returns by residents of states having income tax laws, the personal exemptions allowed, due dates for filing and paying taxes, the state office from which further details may be obtained applicable to servicemen.

SUMMARY OF INCOME-TAX LAWS OF STATES, TERRITORIES, AND POSSESSIONS

NOTE: 1. "Married couple" or "married" as used in this summary means husband and wife living together.

2. A married service man or woman is considered to be living with his or her spouse when separated only by reason of military orders.

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
ALABAMA:				
Net income of: \$1,500 or more if single; \$3,000 if married or head of family. Declaration of estimated tax required if net income other than wages exceeds \$1,500 for an individual and \$3,000 for married couples.	\$1,500 if single; \$3,000 if married or head of family; \$300 for each dependent.	Return due 15 April. Payment with return. Declaration due 15 April. Payment of estimated tax with declaration or in installments.	State Department of Revenue, Income Tax Division, Montgomery 2, Alabama	None. Members of Armed Forces outside Continental United States may defer filing until 30 days after return to United States.

THE BULLETIN BOARD

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
ALASKA:				
Gross income of \$600 or more from sources within the Territory.	\$600 for taxpayer; \$600 for spouse; \$600 for each dependent. \$600 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return.	Department of Taxation, Territory of Alaska, Alaska Office Building, Juneau, Alaska.	All active-service pay is exempt beginning 1 January 1951. Members of Armed Forces may defer paying until 6 months after discharge if ability to pay is impaired by reason of military or naval service.
ARIZONA:				
Net income of \$1,000 or more if single; \$2,000 or more if married; gross income of \$5,000 or more.	\$1,000 if single; \$2,000 if married or head of household; \$600 for each dependent. \$500 additional for taxpayer and spouse for blindness.	Return due 15 April. Payment with return or in three equal installments.	Arizona State Tax Commission, Income Tax Division, Phoenix, Arizona.	\$1,000 active-service pay is exempt. Members of Armed Forces outside continental United States may defer filing returns and payment of tax, without interest or penalty, until 180 days after release or termination of the emergency, whichever is the earlier.
ARKANSAS:				
Gross income of: \$1,750 or more if single or separated from spouse; \$3,500 or more if married or head of family.	Credit from tax: \$17.50 if single; \$35 if married or head of a family; \$6 for each dependent.	Return due 15 May. Payment with return or in two equal installments.	State of Arkansas, Department of Revenue, Little Rock, Arkansas.	All active-service pay is excluded from gross income.
CALIFORNIA:				
Net income of: \$2,000 or more if single or head of household; \$3,500 or more if married. Gross income of: \$5,000 or more.	\$2,000 if single; \$3,500 if married or head of household; \$400 for each dependent. \$500 additional for taxpayer and spouse for blindness.	Return due 15 April. Payment with return or in three equal installments.	State of California Franchise Tax Board, 1020 N Street, Sacramento 14, California.	\$1,000 active-service pay received after 30 June 1952 is exempt. Members of Armed Forces outside Continental United States on or after 8 April 1953 granted automatic extension for filing returns and payment of tax, without penalty or interest, until 180 days after return to United States, or 6 June 1955, whichever is later, if released after 8 December 1954.
COLORADO:				
Gross income of \$750 or more.	\$750 for taxpayer; \$750 for spouse on joint return; \$750 for each dependent. \$750 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return.	State of Colorado, Department of Revenue, State Capitol Annex, Denver 2, Colorado.	\$2,000 of active or reserve service pay is excluded from gross income during a time of war or national emergency; \$1,000 may be excluded during any year that the United States is not in a state of war or national emergency. (The \$2,000 exclusion will apply to 1957.) Members of the Armed Forces may defer filing returns and payment of tax without penalty or interest until one year after separation.

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
CONNECTICUT:				
None.				
DELAWARE:				
Gross income of: \$600 or more if single or separated from spouse; \$1,200 combined gross income of married couple.	\$600 for taxpayer; \$600 for spouse; \$600 for each dependent; \$600 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 30 April. Payment with return or in four equal installments if tax exceeds \$5.	State of Delaware, Tax Department, 843 King Street, Wilmington 99, Delaware.	None. Members of Armed Forces may, upon written application, be granted deferment for filing and paying until 6 months after discharge.
DISTRICT OF COLUMBIA:				
Gross income of: More than \$1,000 if single, or separated from spouse; more than \$2,000 of combined income of married couple; or gross receipts of more than \$5,000. Declaration of estimated tax required if gross income from wages subject to D.C. withholding plus \$1,000 or less from other sources exceeds personal exemptions plus \$5,000; or if gross income includes more than \$1,000 not subject to D.C. withholding and exceeds personal exemptions plus \$500.	\$1,000 if single or separated from spouse; \$2,000 if married or head of family; \$500 for each dependent. \$500 additional for taxpayer and spouse for blindness and being over 65 or over.	Return due 15 April. Payment with return. Declaration due 15 April. Payment of estimated tax due with declaration or in installments.	District of Columbia Income and Franchise Tax Division, Room 2033, Municipal Center, 300 Indiana Ave. N.W., Washington 1, D.C.	None. Deferment for filing returns or paying taxes granted members of Armed Forces outside the United States until 6 months after return.
FLORIDA:				
None.				
GEORGIA:				
Gross Income of: \$1,500 or more if single or separated from spouse; \$3,000 combined gross income of married couple.	\$1,500 if single; \$3,000 if married or head of family; \$600 for each dependent. \$600 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return or in three equal installments if tax exceeds \$30.	Department of Revenue, Income Tax Unit, 502 State Office Building, Atlanta 3, Georgia.	\$1,500 active-service pay is excluded from gross income from 1 January 1950 until termination of the Korean conflict. (This exclusion will apply for 1957.) Deferment for filing returns or paying taxes granted members of the Armed Forces outside continental United States until the 15th day of the sixth month after return to the United States.
GUAM:				
Gross income of: \$600 or more.	\$600 for taxpayer; \$600 for spouse; \$600 for each dependent. \$600 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return.	Division of Revenue and Taxation, Commissioner's Office, Department of Finance, Government of Guam, P.O. Box 1086, Agaña, Guam.	Income of members of Armed Forces subject to same computations as for Federal returns.

THE BULLETIN BOARD

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
HAWAII:				
Any amount from rents or a profession. Other income from within or without the territory — \$1,100 if single, \$2,200 if married, or gross income from compensation and/or dividends taxable under the Compensation and Dividends Tax Law, with exception of \$50 or less interest, etc., \$2,850 if single, \$5,900 if married.	\$1,000 if single; \$2,000 if married or head of family; \$200 for each dependent. \$5,000 exemption in lieu of normal exemption for taxpayer if blind.	Net income tax: Return due 20 April. Payment with return or in four equal installments. Compensation and dividends tax: Return and payment due on or before 20th day of each month.	Bureau of Income and Miscellaneous Taxes, Territory of Hawaii, Department of the Tax Commissioner, P.O. Box 259, Honolulu 9, Hawaii.	Compensation received from the United States for service in the Armed Forces is excluded from gross income. Members of Armed Forces may defer paying not later than 6 months after discharge if ability to pay is impaired by reason of such service.
IDAHO:				
Net income in excess of personal exemptions.	\$700 if single; \$1,500 if married; \$200 for each dependent. \$5 credit from tax for each dependent in addition to exemption.	Return due 15 April. Payment with return or in two equal installments.	State of Idaho, Office of Tax Collector, Income Tax Division, P.O. Box 1399, Boise, Idaho.	Idaho servicemen exempt if serving outside the State. Members of Armed Forces outside continental limits of United States may defer filing returns and paying taxes until 6 months after discharge.
ILLINOIS:				
None.				
INDIANA:				
Gross income over \$1,000. Joint returns not permitted.	\$1,000 for each taxpayer.	Quarterly returns (required when tax for any quarter exceeds \$25) due by 30 April, 31 July, and 31 October. Annual return due 31 January. Payment with return.	Indiana Department of State Revenue, Gross Income Tax Division, 141 South Meridian Street, Indianapolis 13, Indiana.	All active-service pay is exempt. Members of Armed Forces may defer filing returns and paying tax until 6 months after discharge.
IOWA:				
Net income of: \$1,500 or over if single, or separated from spouse; \$2,350 or over if married; or married couple with combined net income of \$2,000 or over if filing separate returns.	Credit from tax: \$15 if single; \$30 if married or head of family; \$7.50 for each dependent.	Return due 30 April. Payment due with return or in two equal installments if tax is \$10 or more.	State Tax Commissioner, Income Tax Division, State Office Building, Des Moines 19, Iowa.	None.
KANSAS:				
Net income of: \$600 or more if single or separated from spouse; \$1,200 or more if married. Gross income of: \$4,000 or more.	\$600 for taxpayer; \$600 for spouse; \$600 for each dependent; \$600 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return or in two equal installments.	State of Kansas, Department of Revenue, Income Tax Division, Statehouse, Topeka, Kansas.	\$1,500 active-service pay excluded from gross income until the termination of the present world crisis as determined by the Executive Council of the State. Deferment granted members of Armed Forces for filing returns and paying taxes until 1 year after discharge or 1 year after termination of present world crisis, whichever is earlier.

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
KENTUCKY:				
Gross income of \$600 or more; \$1,200 if individual is 65 years of age. Declaration of estimated tax required if gross income will be \$600 or more, and if gross income from sources other than wages will be \$100 or more.	Credit from tax: \$12 for taxpayer; \$12 for spouse; \$12 for each dependent. \$12 additional for taxpayer and spouse 65 or over, or blind.	Return due 15 April. Payment with return. Declaration due 15 April. Payment of estimated tax with declaration or in installments.	Commonwealth of Kentucky, Department of Revenue, Frankfort, Kentucky.	None. Members of the Armed Forces who were drafted or are temporarily on active duty may defer filing returns and paying taxes until 12 months after termination of the national emergency, or termination of military service, whichever is earlier.
LOUISIANA:				
Net income of \$2,500 or more if single or separated from spouse; \$5,000 or more if married. Gross income of: \$6,000 or more.	\$2,500 if single; \$5,000 if married or head of family; \$400 for each dependent.	Return due 15 May. Payment with return or in three equal installments.	State of Louisiana, Department of Revenue, Baton Rouge 1, Louisiana.	None. Members of Armed Forces on sea or foreign service duty, and prisoners of war, on due date of return have deferment until the earliest of: the month they cease to be a prisoner of war, or cease to be on sea or foreign service duty, or the end of the war.
MAINE:				
None.				
MARYLAND:				
Gross income in excess of: \$800 if single; \$1,600 if married or head of family. Declaration of estimated tax required if income will be \$500 or more not subject to withholding, and total gross income will be \$1,500 or more if single and \$2,500 or more if married.	\$800 if single; \$1,600 if married; \$800 for each dependent. \$800 additional for taxpayer and spouse if over 65 or blind, and for dependents over 65.	Return due 15 April. Payment with return. Declaration due 15 April. Payments of estimated tax with declaration or in installments.	State of Maryland, Comptroller of the Treasury, Income Tax Division, Annapolis, Maryland.	\$1,500 of active-service pay excluded from gross income during time of war or while in combat zone. Members of Armed Forces outside continental United States may defer filing until 3 months after return.
MASSACHUSETTS:				
Earned income of \$2,000 or more. Other taxable income in any amount.	\$2,000 for taxpayer against earned income; \$500 for spouse; \$400 for each dependent. \$2,000 additional for blindness.	Return due 15 April. Payment with return.	The Commonwealth of Massachusetts, Department of Corporations and Taxation, Income Tax Division, 40 Court Street, Boston, Massachusetts.	None.
MICHIGAN:				
None.				
MINNESOTA:				
Gross income in excess of: \$1,000 if single; \$2,000 if married or head of household, or if combined income of married couple exceeds \$2,000.	Credit from tax: \$10 if single; \$30 if married or head of household; \$10 for each dependent. Additional credits for taxpayers for blindness and being 65 or over.	Return due 15 April. Payment with return or in two equal installments.	State of Minnesota, Department of Taxation, Income Tax Division, 156 East 6th Street, St. Paul 1, Minnesota.	\$3,000 active-service pay excluded from gross income. Members of Armed Forces outside continental United States continuously for more than 90 days granted extension of time until 6 months after return.

THE BULLETIN BOARD

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
MISSISSIPPI:				
Net income in excess of personal exemptions. Gross income over \$6,000.	\$4,000 if single; \$6,000 if married. No personal exemption for dependents.	Return due 15 April. Payment with return or in four equal installments.	State Tax Commission, Income Tax Division, Jackson, Mississippi.	None.
MISSOURI:				
Gross income of \$1,200 or more if single; \$2,400 or more if married or head of family.	\$1,200 if single; \$2,400 if married or head of family; \$400 for each dependent.	Return due 15 April. Payment with return.	State of Missouri, Department of Revenue, Division of Tax Collection (Income Tax), P.O. Box 629, Jefferson City, Missouri.	\$3,000 active-service pay exempt beginning with calendar year 1951.
MONTANA:				
Net income of \$600 or over if single; \$1,200 or more if married or head of family. Gross income of: \$1,200 or more. Declaration of estimated tax required where income not subject to withholding can be exacted to equal or exceed income subject to withholding.	\$600 if single; \$1,200 if married or head of family; \$600 for each dependent. \$600 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return. Declaration due 15 April. Payment of estimated tax with declaration or in two installments.	State of Montana, Board of Equalization, State Capitol Building, Helena, Montana.	None. Members of Armed Forces may defer filing returns and paying taxes until 6 months after discharge in cases of undue hardship caused by military service.
NEBRASKA:				
None.				
NEVADA:				
None.				
NEW HAMPSHIRE:				
Any amount of taxable income from interest or dividends. Joint returns not permitted.	\$600 for each taxpayer.	Return due 1 May. Payment with return.	State Tax Commission, Interest and Dividends Division, Box 345, Concord, New Hampshire.	None.
NEW JERSEY:				
None.				
NEW MEXICO:				
Gross income of: \$1,500 or more if single; \$2,500 or more if married.	\$1,500 if single; \$2,500 if married. \$200 for each dependent.	Return due 15 April. Payment with return or in four equal installments.	State of New Mexico, Income Tax Division, Bureau of Revenue, P.O. Box 451, Santa Fe, New Mexico.	None.
NEW YORK:				
Combined net income and capital gain of: \$1,000 or more if single or separated from spouse; \$2,500 or more if married or head of family. (Note: Net income is computed without deduction of capital losses.) Combined gross income and capital gain of \$5,000 or more.	\$1,000 if single; \$2,500 if married or head of family; \$400 for each dependent; \$800 if over 18 and full-time student. \$400 additional for taxpayer and spouse for blindness and being 65 or over (reduced by gross income over \$6,000.)	Return due 15 April. Payment with return or in installments if tax is more than \$10, but no payment except the last may be less than \$10; four equal installments if tax is more than \$40.	State of New York, Department of Taxation and Finance, Income Tax Bureau, Albany 1, New York.	None, except that domiciliaries who maintain no permanent place of abode in New York, and who spend no more than 30 days of the year in the State are exempt.

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
NORTH CAROLINA:				
Gross income of: \$1,000 if single, or if a married woman with separate income; \$2,000 if a married man living with his wife. Gross income from business or profession in excess of personal exemption. Joint return not permitted.	\$1,000 if single, or a married woman living with her husband; \$2,000 if married man living with his wife, or head of household; \$2,000 if widow or widower with minor child; \$300 for each dependent. \$1,000 additional if blind.	Return due on or before 15 April. Payment due with return or in two equal installments if tax is over \$50; four equal installments if tax is more than \$400.	State of North Carolina, Department of Revenue, Individual Income Tax Division, Raleigh, North Carolina.	None.
NORTH DAKOTA:				
Net income of \$600 or more if single or separated from spouse; \$1,500 or more if married or head of household. Gross income of: \$5,000 or more.	\$600 if single; \$1,500 if married or head of household; \$600 for each dependent. \$600 additional for taxpayer and spouse 65 or over, or blind.	Return due 15 April. Payment with return or in installments if tax exceeds \$100.	State of North Dakota, Office of Tax Commissioner, State Capitol Building, Bismarck, North Dakota.	All active-service pay is exempt. Deferment granted to members of Armed Forces until the 15th day of 6th month following discharge.
OHIO:				
No personal income tax, but residents of some Ohio cities and municipalities may be liable for income taxes.				
OKLAHOMA:				
Gross income of: \$1,000 or more if single; \$2,000 if married.	\$1,000 if single; \$2,000 if married or head of family; \$500 for each dependent.	Return due 15 April. Payment with return or in installments if the tax is \$25 or more.	Oklahoma Tax Commission, State of Oklahoma, Income Tax Division, Oklahoma City 5, Oklahoma.	\$1,500 of active-service pay excluded from gross income. Members of Armed Forces outside the United States, or confined to a hospital in the United States, may defer filing returns and payment of tax, without interest or penalty, until the 15th day of the third month following return to United States, or discharge from such hospital.
OREGON:				
Net income in excess of personal exemptions.	\$600 if single, or separated from spouse; \$1,200 if married or head of family; \$600 for each dependent. \$600 additional for taxpayer or spouse if blind plus \$18 credit against tax. \$12 credit against tax for taxpayer or spouse if 65 or over in addition to personal exemption. \$1 credit for each \$100 contributed for support of each dependent in addition to personal exemption.	Return due 15 April. Payment with return or in installments if tax exceeds \$25.	Oregon State Tax Commission, Income Division, 100 State Office Building, Salem, Oregon; or State Tax Commission, 1400 S.W. 5th Avenue, Portland, Oregon.	\$3,000 active-service pay is excluded from gross income. Members of Armed Forces have extension of time for filing returns and paying taxes by disregarding period of active duty outside the United States, subject to minimum of 90 days.

THE BULLETIN BOARD

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
PENNSYLVANIA: No personal income tax, but residents of some Pennsylvania cities and municipalities may be liable for local income taxes.				
PUERTO RICO: Gross income of: over \$800 if single or sep- arated from spouse or if head of family; Over \$2,000 if mar- ried and living with spouse.				
\$800 if single or sep- arated from spouse; \$2,000 if married or head of family; \$400 for each dependent.	Return due 15 April. Payment with return or in installments where no declaration of esti- mated tax was elected.	Commonwealth of Puerto Rico, Department of the Treasury, Bureau of Income Tax, P.O. Box 9717, San Juan (Santurce), Puerto Rico.	None generally; however, a qualified special \$500 deduction is allowed to veterans. Members of Armed Forces outside Puerto Rico may defer filing and paying.	
RHODE ISLAND: None.				
SOUTH CAROLINA: Net income of: \$1,000 or more if single or separated from spouse; \$1,800 or more net aggregate income of married couple.				
\$1,000 if single; \$2,000 if married or head of a household; \$400 for each dependent.	Return due 15 April. Payment with return or in installments if tax exceeds \$25.	South Carolina Tax Commission, Income Tax Division, Drawer 420, Columbia 1, South Carolina.	Income of members of Armed Forces subject to same computations as for Federal returns.	
SOUTH DAKOTA: None.				
TENNESSEE: Income of \$25 or more from dividends and interest.				
None.	Returns due 15 April. Payment with return.	State of Tennessee, Department of Finance and Taxation, Income Tax Division, Nashville, Tennessee.	None.	
TEXAS: None.				
UTAH: Gross income of: \$600 or more if single or separated from spouse; \$1,200 or more if married.				
\$600 if single; \$1,200 if married; \$600 for each dependent. \$600 additional for taxpayer and spouse for blind- ness.	Return due 15 April. Payment with return.	State Tax Commission, 118 State Capitol, Salt Lake City 14, Utah.	None.	
VERMONT: Gross income of \$500 or more. Declaration of estimated tax re- quired on income not subject to withholding.				
\$500 for taxpayer; \$500 for spouse; \$500 for each dependent. \$500 additional for taxpayer and spouse for blindness and being 65 or over.	Return due 15 April. Payment with return. Declaration due 15 April. Payment of estimated tax with declaration, or in installments.	Commissioner of Taxes, State Tax Department, Montpelier, Vermont.	Income of members of Armed Forces subject to some computations as for Federal returns. Members of the Armed Forces may defer filing returns and paying taxes no later than 6 months from date of dis- charge.	
VIRGINIA: Gross income of: \$1,000 or more.				
\$1,000 for taxpayer; \$1,000 for spouse; \$200 for each dependent. \$600 additional for tax- payer and spouse for blindness and being 65 or over. \$800 additional for dependent mother, father, son, daughter, brother, or sister of un- married taxpayer.	Return due 1 May. Pay- ment with return or in installments if tax ex- ceeds \$50.	Commissioner of Revenue, of the county of which taxpayer is a resident; or Commonwealth of Virginia, Department of Taxation, Richmond 15, Virginia.	None.	
WASHINGTON: None.				

Amount of income which requires residents to file returns	Personal exemptions	Due date for return and payments	Title and address of taxing authority	Special provisions applicable to armed services personnel
WEST VIRGINIA: None.				
WISCONSIN: Net income of: \$1,400 combined net income of married couple. Gross income of: \$600 or more.				
Credit from tax: \$7 if single; \$14 if married or head of family; \$7 for each dependent.	Return due 15 April. Payment with return or in installments if tax exceeds \$20.	State of Wisconsin, Department of Taxation, Room 1000, State Office Building, Madison 2, Wisconsin; or Assessor of Income for county in which taxpayer resides.	\$1,500 active-service pay is excluded through 1958. Extension of time for filing and paying taxes is granted to members of the Armed Forces outside the United States on the date their taxable year ends or the date returns are due, until 6 months after discharge, but in no case after 15 June 1959.	
WYOMING: None.				

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers instructions and Notices apply to all ships and stations.

Alnavs

No. 1—Orders the discontinuance and sale of certain food stuffs.

No. 2—Announced the receipt by the Department of the Navy of the President's Safety Award for 1956, for having the most outstanding record of performance and accomplishment in safety.

Instructions

No. 1085.44—Emphasizes the importance of accurate maintenance of service records for the purpose of reducing service-record errors.

No. 1500.25D—Lists the dates for classes at training activities under the management of the Chief of Naval Personnel, and certain schools of other services.

No. 1510.67A—Describes the procedures for administering enlisted correspondence courses of the Naval

Correspondence Course Center to active duty enlisted personnel.

No. 1910.12B—Authorizes the early (up to three months) separation of enlisted personnel for the purpose of commencing or resuming college education.

Notices

No. 1301 (6 January)—Discussed the current practices concerning the assignment and rotation of lieutenants (junior grade) and ensigns holding the designators 11xx, 13xx, 17xx and 18xx.

No. 1306 (8 January)—Established the sea-tour commencement dates for enlisted personnel to be eligible for Seavey Segment Two, which will be effective 1 June.

No. 1321 (9 January)—Announced Change No. 2 to BuPers Inst. 1321.2B, which is concerned with the subject of issuance of tem-

porary additional duty orders involving travel of officers and midshipmen.

No. 1223 (13 January)—Announced Change No. 5 to BuPers Inst. 1223.1, which is concerned with the Selective Emergency Service Rates program.

No. 1418 (15 January)—Announced the schedule of service-wide examinations for advancement to pay grade E-4 of specified ratings to be held in May.

No. 1440 (24 January)—Established procedures for effecting changes in rating to the AO rating to conform with modifications of the Enlisted Rating Structure.

More CPOs and POIs Receive Warrant Officer Appointments

Seven first class and 10 chief petty officers have been issued temporary appointments to Warrant Officer, W-1.

These appointments are from an eligibility list established by a selection board convened 5 Feb 1957.

Regular Navy appointments were broken down into the following designators: Boatswain (7132), two; Surface Ordnance Technician (7232), two; Electrician (7542), one; Aviation Electronic Technician (7612), three; Communication Technician (7642), two; Ship Repair Technician (7742), one; Ship's Clerk (7822), one; Supply Clerk (7982), three; Photographer (8312), one; Civil Engineer Corps (8492), one person selected.



"Operator! — Get me BUSHIPS!"

COs May Authorize Separation Up to Three Months Early For Entrants to College

You may now receive permission from your commanding officer to be separated up to three months early provided you can establish eligibility. This authority and the conditions of eligibility are laid down in BuPers Inst. 1910.12B.

Up until this year, requests went to the Bureau via your commanding officer. This year it's different.

But different or not, in no case will you be separated more than three months before your normal expiration of active obligated service date and within this limitation, not earlier than 10 days before the date of convening of classes at the college.

To clarify this further, your normal expiration of active obligated service date is the date upon which you would normally be eligible for discharge or release to inactive duty. When early separation programs are in effect, the "advanced" separation date is *not* used as normal expiration of active obligated service date.

Here is what you will need in the way of a statement from a college or university official to establish eligibility for release:

- That the university or college is currently listed in the Education Directory (Part 3-Higher Education), U. S. Department of Health, Education and Welfare.

- That you have been unconditionally accepted by the college or university for entrance in a specified semester or quarter.

- Convening date of class for the specified semester or quarter.

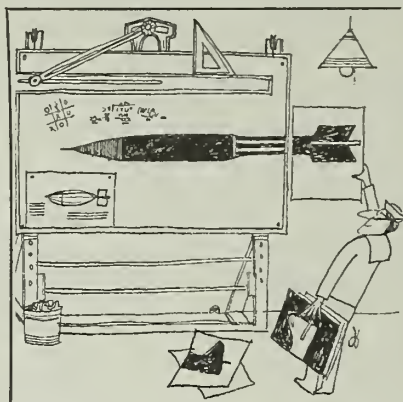
- The latest date on which you will be permitted to register for the specified semester or quarter.

- Convening date of class for the next succeeding semester or quarter in which you may enroll.

- That enrollment is for a full-time course of instruction.

There should also be a statement from a college or university official, or from you, which establishes the fact that you will be unduly handicapped in the pursuit of your education by delay in entrance until a date later than your normal separation date.

An undue handicap may be considered to exist provided you can



establish that scheduling of required courses in your field of study will result in a long delay in graduation if you are unable to enter the term you desire.

In addition and as a guide, undue handicap may be considered to exist when your normal EAOS falls not more than half-way between convening dates of classes for the term in which you desire to enroll, and the next succeeding term in which you may enroll. Here's an example of undue handicap:

Convening date of	
classes for fall term	25 Sep 1958
Normal EAOS	25 Nov 1958
Convening date of classes	
for next term in which	
you may enroll	3 Feb 1959

On the other hand, the following case would *not* normally constitute undue hardship:

Convening date of	
classes for fall term	25 Sep 1958
Normal EAOS	25 Nov 1958
Convening date of classes	
for next term in which	
you may enroll	2 Jan 1959

There are factors which can render you ineligible for early separation. Your performance of duty must have been meritorious. In the absence of other conclusive evidence of meritorious performance, one conviction by court-martial, or two impositions of commanding officer's non-judicial punishment during your current enlistment or tour of active duty, will hold you up.

If, to let you out early without an immediate replacement would reduce the operational readiness of the command to an unacceptable degree or, if your commanding officer feels that the only reason you're putting in for the early separation is to avoid service, then these reasons can prevent your early out.

Reservist May Extend Beyond End of Obligated Service

If you've been around the scuttlebutt recently you've probably picked up a fair share of rumors—and the chances are that a good percentage of them are inaccurate—as usual.

One of these items of scuttlebutt has it that BuPers Inst. 1910.5D will prevent enlisted Reservists from obtaining extensions of their active duty. Some Reservists, who have only a few years of active duty left before they can retire, have been especially taken in by this gossip.

The rumor is definitely *not* correct.

BuPers Inst. 1133.10A still authorizes a Reservist, who has sufficient obligated service, to obligate himself (subject to his CO's approval) to perform up to 48 months' additional active duty beyond his current date of expiration of active obligated service.

Here's List of New and Discontinued Courses

Seven more Enlisted Correspondence Courses are now available and four have been discontinued.

They are:

New Courses	NovPers No.
Aviation Structural Mechanic 3, Volume 1	91625
Fire Control Technician 2	91340
Aviation Structural Mechanic 2, Volume 1	91626
Signalman 3	91290
Airman	91600
Aviation Electronics Technician	91613
Signalman 2	91291

Discontinued Courses	
Fire Controlman 2, Volume 1	91318-C
Fire Controlman 2, Volume 2	91319-C
Aircraft Structures	91620-1B
Aircraft Structural Maintenance	91621-B

Enlisted Correspondence Courses will be administered (with certain exceptions) by your local command instead of by the Center.

If you are on active duty, your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command for administration.

Those on inactive duty will have courses administered by Center.

Everyone's Talking about Rota, Latest in Overseas Billets

LOCATED ON THE WESTERN shores of the Bay of Cadiz on Spain's southern Atlantic coast, U. S. Naval Activities, Rota, Spain, with its sub-commands — Naval Air Station, Naval Fuel Depot, Naval Magazine and Marine Barracks—offers Navy-men unique liberty opportunities.

A long weekend or four-day leave can put you in Africa or Portugal. A short weekend gives you a chance to visit Gibraltar or Seville. On a long leave, all Europe is your oyster.

Rota Naval Base represents the U. S. Navy's largest installation in the European-African area. When fully operational—some time in 1960—it will have all the comforts of a big stateside base.

Because of its newness at present, you and your family might experience some difficulties—mainly housing. Until fall there will be few units of government housing available (162 are already built and occupied). Some 334 additional units will be ready in October. The base, however, maintains a limited list of off-base housing. Bachelor quarters and messing for both officer and enlisted personnel are comfortable and adequate.

If you get orders for duty at Rota, here's a preview of Navy life in Southern Spain:

Climate

The Rota area, from April to October, is rather hot and sometimes dusty. The landscape and climate make it very similar to parts of southern California. The winter months are generally rainy, damp and frequently bone-chilling. The months at the beginning and end of winter are usually clear, cool and brisk.

The summer heat is moderated a bit by a sea breeze which blows more or less steadily from the Atlantic.

Temperatures from May to October range from 75 to 90 degrees; occasionally the mercury may reach 100 in mid-summer. Temperature lows during the same period vary from 55 to 70 degrees. The winter highs are 65 to 70 degrees, lows 45 to 55. Below-freezing temperatures rarely occur during the winter, but as humidity increases, the cold becomes quite penetrating.

Rainfall is not extreme, but can be sudden and heavy—almost semi-tropical in nature. The rainy months are December through March.

Inoculations

All military personnel and their dependents must receive a full set of immunization shots (small pox, tetanus, typhoid and typhus) before leaving the United States for Spain. Armed Forces medical facilities will provide inoculations; you can also receive them from the U. S. Public Health Service or a private physician. A certificate indicating the inoculations received should be carried.

Transportation

There is little likelihood that any concurrent travel orders will be issued for the next six months. Navy bachelors and husbands ordered to Rota will more than likely fly MATS to the base via either Madrid or Port Lyautey.

Navy-men with dependents will first have to secure quarters (probably temporary off-base, until on-base housing becomes ready in November) before entry approval for dependents can be granted.

The Bureau of Naval Personnel's Transportation Section will then arrange for seats on a MATS flight from Maguire (New Jersey) Air Force Base to Rota via Madrid, or berthing on a commercial ocean liner sailing for Spain from New York (passengers generally disembark at Algeciras or Cadiz—Rota provides transportation for dependents and baggage from ports of entry). Passports must be obtained for all dependents entering Spain.

An automobile is almost a necessity. If you don't own one now, you can buy one after you arrive. A sturdy, economical European car may be bought locally through reputable agents for \$1200 upwards.

If you bring your present car, you must deliver it to the Naval Supply Depot at Bayonne, N. J., for shipment. Provide all necessary documents, including registration. If you have a lien on the vehicle, be sure you have a statement granting permission to ship the car overseas. Automobiles are generally shipped by commercial vessel to Cadiz (about 35 miles from Rota). Marine

insurance is an advantage. Liability insurance is compulsory in Spain; Spanish companies offer excellent coverage at nominal rates. Experience has shown that local companies are able to provide faster action than those with headquarters only in the U. S.

Spanish mechanics, although faced with a spare-parts import problem, are excellent do-it-yourself workers. In many cases, they can duplicate a broken part cheaper than it would cost to ship one in.

The best grade of gasoline available in Spain is roughly equivalent to the "regular" gas of the States. Military gas coupons, good at any Spanish filling station, enable you

NOW HERE'S THIS

How Now, No Cow?

If you think moving is a problem, how would you like to be in the shoes of a certain Navy captain?

The captain, his wife and two daughters, recently transferred from California to Memphis, Tenn. To get there, they made a cross-country trip with five cats, four dogs, two parakeets, one spider monkey and two horses.

The horses made the trip in a trailer, drawn by the family station wagon. The family traveled in the wagon along with the five cats, four dogs, two parakeets and one spider monkey. A third horse had to be shipped separately—there wasn't quite enough room.

This sort of thing is old hat to this Navy-man, whose family has been traveling with the private zoo through 12 changes of duty.

On this latest trip their worst problem was the monkey. It had to be chained to a door to keep it from blowing the horn.



to buy gas at about 18¢ a gallon.

The roads of Spain, while almost universally picturesque, were not built with the big American automobile in mind. Further, the Spanish people are not educated in the potential of a 200-plus horsepower high-compression engine. Spanish driving, frankly, can be a hazard for persons used to American highways. The roads from before dawn to beyond midnight are frequently crowded with pedestrians, burros, mule-carts, bicyclists, vintage automobiles and impatient heavy-duty trucks. Generally, there isn't much chance of running over 50 mph for any extended period.

In spite of all the drawbacks to driving, seeing Spain—and Europe—by automobile is one of the high points of a tour of duty at Rota.

Housing

As mentioned earlier, 162 units of government housing are available but now occupied by Navy families. This community will be increased by 334 units, the first 100 of which should be ready by November.

A housing waiting line is being maintained at the moment, based on a point system which takes in such items as rank/rate and date of reporting aboard.

The houses are of a duplex type, of Spanish construction, and resemble typical California-style homes; a car port separates the two halves of each duplex unit. They come in two- and three-bedroom sizes. Furniture provided by the government includes complete living room, bedroom and dining suites,



"I give up, Charlie! What does have a big mouth and is a hundred feet long?"

electric stoves and refrigerators and rugs.

The off-base housing in the area consists of houses and apartments in the village of Rota and in the medium-sized cities of Jerez de la Frontera (17 miles from the base) and Puerto de Santa Maria (eight miles). Most are semi-furnished, although several unfurnished types also exist. You'll have to decide what to ship from the States after you've viewed the furnishings provided (there are no storage facilities at Rota).

Most of the older Spanish living accommodations do not approach U. S. standards in respect to electricity, water and heating. Some new Spanish civilian construction will have American-type facilities. Rents range from \$65 to \$200 for a reasonably livable house or apartment, depending basically on its location and condition and also upon your bargaining ability. In most cases the Spanish landlord will demand a one-year lease and usually a month's rent in advance. The base Security Officer and Legal Officer will check the contract before any final agreement is made.

One major factor to be borne in mind if you plan to live in Spanish quarters is the electrical power. Spanish current runs at 50 cycles. Your appliances should be of the type which function at 50-60 cycles. Voltage surges which may at times hit 160 volts could burn out the motor of a refrigerator or washing machine; it would be advisable to

purchase voltage regulators for these (available at Rota in the Ship's Store). Then, too, record players and tape recorders would have to be adapted to the lesser frequency input of 50 cycles. On-base Navy housing has 60-cycle, 110-volt current.

Small portable electric or kerosene heaters are a necessity in Spanish homes which have no central heating. These are available on the Spanish market or from the Navy Ship's Stores. Some of the homes and apartments have fireplaces; the Navy has stocks of firewood for sale.

It is suggested that you look over the housing situation after you arrive, decide either to wait for a government unit or contract for Spanish housing; then, as soon as housing arrangements are firm, request entry approval for your dependents. The type of household goods to be shipped will depend on whether you choose Spanish or Navy housing.

Domestic help is available and is quite economical. A good maid (general housework, laundry, some cooking) receives a salary ranging from \$6.00 to \$8.00 a month on an eight-hour-a-day basis. But, this isn't your only expense if you want servants: you've got to provide shoes and uniforms, insurance, usually a two-week Christmas bonus, a vacation, and meals. Figure on about \$40.00 per month.

Pets — Make sure you have all necessary documents before leaving the U. S. if you want to bring pets to Spain. Check with a Spanish Consul.

Clothing

Rota's winter climate is relatively mild but, because of the dampness and inadequate heating in Spanish homes, woolen clothing, heavy sweaters and topcoats should be brought.

It would be a good idea to bring at least a year's supply of clothing and shoes; for although clothing is available at the Rota Navy Ship's Store and at the Armed Forces European Exchange (AFEX) in Seville, stocks are limited.

Excellent clothing buys may, however, be made in nearby Gibraltar. British woolens and tailoring are available at reasonable prices. A generous selection of women's clothing is always on display in Gibraltar shops.



"If I told you where I was, you wouldn't believe me!"

WAY BACK WHEN

Comet, Privateersman of 1812

Children's clothing may be purchased either in the Ship's Store at Rota, AFEX in Seville, in Gibraltar or on the Spanish market. Spanish and British styles are similar to those of the U. S.

Spain is a rather conservative country in terms of dress. Women seldom wear shorts or slacks when in public (except when engaged in sports); two-piece bathing suits are generally taboo on beaches; low-cut dresses are not worn in public except with a shawl or jacket. When visiting cathedrals, women *must* wear hats or other head covering and have their arms covered at least to the elbow.

Navy men wear uniforms so a full seabag is necessary. Officers and CPOs wear service dress blue in the winter months, service dress or tropical khaki (or white) in the summer. Enlisted men wear whites in summer, blues in winter. Dungarees and working khaki are authorized for jobs which would dirty prescribed uniforms.

Civilian clothes are recommended for leave and liberty. Men in Spain dress conservatively. Except for hot summer months, Navy men in civilian clothing must wear a coat and tie in public. Slacks and sport shirts are permissible only during the summer.

Dry cleaning facilities (Spanish) are available on the base. A laundry, tailor and cobbler shop will open shortly.

Women will want a formal or two, cocktail dresses, plenty of washable summer frocks and a few dressy winter woollens.

Currency

American currency is used exclusively on the base. There are no banking facilities; it is suggested that a checking account be maintained with an American bank. Spanish pesetas—worth 46 to the dollar (U. S. military exchange)—can be obtained on the base. Personal checks (under \$100) will be accepted in the Ship's Store.

Base Shopping

A recently-established Navy Ship's Store (Ashore) stocks uniforms, clothing, tobacco, household needs, toys, European products and a good general department store selection. The commissary section offers American canned and packaged

During the War of 1812, privateersmen dealt in a trade that was carried over from the Revolutionary War days. They were fearless and self-reliant. These men rode small, fast sailing ships that were over-sparred, overarmed and overmanned, and took many risks in order to capture ships as prizes. One of these privateers was the 14-gun *Comet*.

She was out of Baltimore, Md., and commanded by Captain Boyle, an excellent sailor who was liked and trusted by his 120-man crew. She carried six guns in a broadside, a swivel, and a gun amidships. Extra crews and prize masters to man her captures were crowded between her decks.

One of the incidents started 9 Jan 1813 when Captain Boyle cruised his little ship up and down in front of the harbor of Pernambuco, Brazil, for five days, waiting for three loaded English ships to come out. On the 14th they were spotted moving out of the harbor, joined by a fourth. Captain Boyle moved out of the way to let them pass, then put after them.

The little *Comet*, running in a tremendous sea, was spurred on by a freshening breeze. He caught up to the four ships late in the afternoon and slowed to keep pace with them. They showed no apparent fear of the little ship.

Around 1800 Captain Boyle discovered why they showed no concern when one of the ships drifted back as though waiting for the American to catch up. This ship was a large man-o'-war brig. Quickly, *Comet's* guns were loaded with round shot and grape and the decks cleared for action. Captain Boyle hoisted the American flag. The other hoisted Portuguese colors.

The captain of the brig hailed *Comet*. Both ships hove to and the Portuguese brig sent over a boat. When he came aboard, the Portuguese officer appeared startled at seeing the men standing stripped to the waist about the guns. He informed Captain Boyle that his ship belonged to His Majesty (of Portugal), that she carried twenty 32-pounders and a crew of 165 men and that his orders were to protect the three English ships. Captain Boyle replied that he had admired the appearance of the ship greatly but that his orders called for capturing the three English ships and if he interfered, he would be the aggressor.

Before leaving, the Portuguese officer reminded him that the other ships also were armed. They were. The English ship *George* had 14 guns, the two smaller English brigs, *Bowes* and *Gambier*, ten guns apiece. Fifty-four guns against 14.

The sun went down and the moon came up as Captain Boyle headed *Comet* toward the largest English ship. He hailed them



to back their main-topsail or he would fire a broadside into her. The man-o'-war brig had crowded on all sail and was hard after the American. *Comet* fired, hitting two of the English ships. The Portuguese brig closed alongside and fired a broadside at *Comet*. *Comet* returned the fire with tremendous effect and tacking, again let go her starboard battery at *Gambier* who was closing in. *Comet* loaded and fired again and the enemy appeared to be confused and frightened. She stuck close to the Englishmen, letting go whole broadsides into them at point-blank range, firing whenever she came within range.

At 2300 the big British ship *George* surrendered, being cut almost to pieces and quite unmanageable. As soon as this happened, Captain Boyle gave *Bowes* a broadside that ripped her bulwarks and cut away her running-gear. She hauled down her flag.

Comet readied a boat with a prize crew and lowered away. The boat was only a short distance away when the Portuguese man-o'-war fired a broadside at the boat nearly swamping it. The boat returned to *Comet* half-full of water and was taken aboard. When *Comet* opened fire with all guns the Portuguese ship broke off the engagement and left the English ships to their destiny. When this happened, *Gambier* surrendered.

All night Captain Boyle kept a weather eye on his prizes.

The three reached Pernambuco in safety—*George* and *Gambier* were in a sinking condition, and the cockpit of the man-o'-war, which was badly cut up below and aloft, filled with dead and wounded.

Comet and *Bowes*, with a prize crew aboard, reached the United States in safety but not before Captain Boyle had made several more important captures and sailed through the entire English blockading squadron in Chesapeake Bay to get to the wharf in Baltimore.

foods, frozen meats, pasteurized milk. Prices are generally lower than Stateside.

A special-order department will arrange to obtain items not carried in stock, from European or American sources.

Medical, Dental Facilities

A full medical and dental staff is on board. However, it is occupying temporary facilities pending completion of a modern dispensary.

Dependent clinics are functioning and pre-natal consultations are available. Until the dispensary is ready, major medical treatment is provided by Armed Forces hospitals at Seville or Port Lyautey.

While no general dental care will be provided dependents (except on a possible "space available" basis), emergencies will be treated. The dental department recommends reputable Spanish dentists for dependents.

Recreation

Getting back to the original theme of "looking for those castles in

Spain," you'll find plenty of historic keeps (fortresses), battlements, and entire cities, some dating back to almost 1000 B.C.

Rota is in the region known as Andalusia, a section of Spain in which the tides of history have ebbed and flowed in colorful ancient glories. Phoenicians, Greeks, Romans, Moors, Crusaders, Napoleonic armies, battled over this fertile—and strategic—seacoast region.

From Palos, 40 miles along the coast north of Rota, Columbus, and later Cortez, set out on their dramatic journeys West. One can still, it is said, sit at the table on which Columbus charted his course, outlined his plans.

In another direction, in the hill country around Arcos de la Frontera, you can view the surrounding landscape from a high battlement once occupied by Roman legionnaires.

This is but a sample of the things you'll see during your tour at Rota. A weekend is time enough to drive (the Navy frequently sends liberty

parties by bus) to famous cities like Granada, Malaga, Seville. Sightseeing is relatively inexpensive; over-nighting in a good hotel or Spanish "motel" runs about \$3.00, less meals.

Within less than an hour's drive from Rota are four bull rings, where you can watch a "corrida" (bullfight).

The city of Jerez is the center of Spain's sherry industry. Bodegas (wineries) open their doors (and samples) to visitors daily. Jerez and Seville feature good restaurants and theaters. There are several nightclubs in Seville offering floorshows which include flamenco dances.

Rota, being on the Atlantic coast, has fine beaches, as well as boating and fishing possibilities.

On the base, outdoor tennis, volleyball and basketball courts are available; a temporary theater runs Hollywood and European films nightly. The new enlisted men's club opened recently; officer and CPO clubs will be ready in a few months.

And, in addition, your orders to Rota translate into a leave ticket for anywhere in Free Europe, Africa and the Near East.

WHAT'S IN A NAME

He's the Most

When someone in the Navy claims a "first," "biggest," "littlest," "youngest," "oldest" or "most" he is usually snowed under with challenges. But, if Isaac Fassett, Steerage Steward, USN (Ret), decides to claim that he has been drawing non-disability retirement pay longer than any other living Navyman it's hard to see how he could have very many challengers.

He's been getting this fringe benefit for the past 47 years, and if not the oldest, he must be at least one of the oldest enlisted men on the retired list.

Fassett was born in Berlin, Md., on 15 Jan 1858—the same year that Abraham Lincoln and Stephen A. Douglas held their famous series of debates. He was 17 years old when General Custer and his men were wiped out by the Sioux in the Battle of the Little Big Horn.

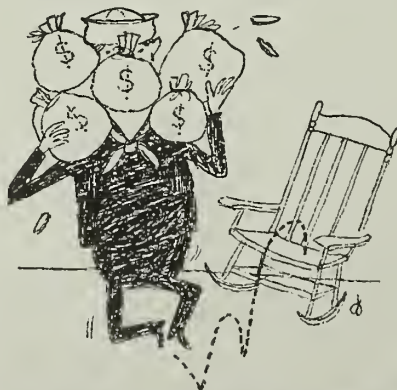
Apparently it took Fassett quite a while to decide on joining the Navy, for he was almost 24 years old when he first enlisted at Philadelphia, Pa., on 3 Dec 1881. That was the year President James A. Garfield was assassinated.

Most of Fassett's Navy career was spent at the Navy Yard, League Island, Pa., where he served in the receiving ships *St. Louis*, *Richmond*, *Minneapolis*, *Puritan* and *Lancaster*. (During the Spanish-Ameri-

can War he was on board *Richmond*.)

He left League Island in 1909, and on 16 Jan 1911, after Atlantic Fleet duty in *USS Louisiana*, *Idaho*, *Franklin* and *Tennessee*, he retired at the age of 53. At that time, since his active duty during the war with Spain counted double, he was credited with 30 years and 20 days of service.

Today, Navyman Fassett is living in Philadelphia, where he celebrated two anniversaries this January — his 100th birthday and his 47th year of retirement.



Religious Facilities

Spain is almost totally Roman Catholic. Most Catholic Navy personnel attend services in the cathedrals of the nearby cities. Protestants are served by an Air Force chaplain who makes weekly trips to Rota; a Sunday School has been established. The base chapel will be completed late this year. A Catholic chaplain is aboard and a Protestant chaplain reports for duty early this month.


Education

A dependents' school is functioning on the base in a temporary five-room building, and is staffed by five teachers. High school is a supervised correspondence-course type. By the beginning of the 1958-59 school year in September, the base's new, modern schoolhouse will be ready for use. The teaching staff will be increased to accommodate full-time high school curricula. There is no fee for tuition, books or materials. Children entering first grade must be six years of age by January of the current school year (the school year is mid-September to mid-June, with a semester break in January).

ROTA

new link in defense chain

As time goes on, the name "Rota" will become more and more familiar to Navymen everywhere. It's the newest of our overseas bases. When completed, it will be one of the world's most modern ship and aircraft support stations, ideally situated for the support of Eastern Atlantic and Sixth Fleet operations. You'll probably see it someday. Here's your introduction.



SPANISH-AMERICAN naval base at Rota is a link in the defense of the free world. Here, workers pause by tetrapod.

Not long ago, the Commander, U. S. Naval Activities, Rota, Spain, slashed with his dress sword a red ribbon—an act which symbolically gave Navymen and their dependents the freedom of Rota's New Navy Exchange commissary and retail store. This was the third such function he had performed within a week and, with that act, the pioneer era for the Americans living at the joint Spanish-American Naval Base came to an end.

You may not have heard much about Rota in the past, but you will from now on. It is a newly constructed naval base which will serve as a defense against aggression in the European-Mediterranean-African area.

RISING OUT OF AN ANCIENT vineyard region on Spain's southern Atlantic coast is the sprawling, 6000-acre

naval complex at Rota. When completed, ships as large as 60,000-ton Forrestal-class aircraft carriers will be able to be moored, refueled, revictualled, and re-ammunitioned, and have jet and conventional aircraft serviced.

Rota, like other United States bases in Spain, is on Spanish soil over which flies the Spanish flag. A Spanish Navy captain is in command of the entire base area; a U. S. Navy captain commands American activities.

A Navy fuel depot is already in operation. It is the port terminus of a 485-mile, multi-product pipeline which feeds aviation and vehicle fuels to four U. S. Air Force Strategic Air Command bases now under construction in the Spanish interior.

Mutual Defense, Economic Aid and Defense agree-

GIANT TETRAPODS ranging in size from 8 to 25 feet give protection to beach at Rota, Navy's new overseas base.





ON A BENDER — Spanish workmen bend steel rods while building fuel oil pump system at the Rota base.

ments signed in 1953 by the American and Spanish governments provide for a 10-year lease on the base sites, subject to two five-year extensions.

When completed, the American installations at Rota will have cost an estimated \$120 million. Facilities of the base will make it one of the world's most modern warship and aircraft support stations.

Spain is also constructing certain naval facilities at the Rota base.

STRATEGICALLY, Rota is ideally situated for the support of Eastern Atlantic and Sixth (Mediterranean) Fleet operations. The base is on the Atlantic, only 60 air miles west of Gibraltar.

When most major construction is finished (in late 1958 with the exception of an artificial harbor which should see completion in mid-1959), Rota will be the site of the largest U. S. Naval shore unit in the European-African area.

The City of Rota (winter population: 14,000) is on the western headland of the Bay of Cadiz. Archaeological discoveries indicate that the Cadiz region was perhaps the site of Europe's first organized city. The Phoenicians established a trading community at Cadiz in approximately 1100 B.C.

Bulldozers and power shovels breaking ground inside the confines of the naval base have turned up Phoenician tombs, coins, and pottery, plus relics of later periods.

PIER FOR TWO — Two T-2 tankers will be able to off-load their cargo simultaneously at Rota's fuel pier.

On one beach, bathers discovered what appeared to be teeth from a prehistoric reptile. The Navy has ordered that all such finds be turned over to Spanish archaeological authorities.

Rota is one of Spain's popular seashore resorts. During the hot summer months, Spaniards come to Rota from big cities like Madrid and Seville to seek relief on the always breezy Atlantic coast.

Just to the east of Rota is the world-famous sherry country of Jerez. Forty miles along the coast to the north, lies Palos, the tiny harbor from which Columbus sailed west to discover the New World in 1492.

THE SPANISH NAVY purchased the tract of land on which the base is being built. Although the base is still in a partially completed state, with most buildings and facilities still under construction, the nucleus Navy community of some 290 Navymen and Marines has been in operation as the advance echelon of the future base.

To get the base underway as soon as possible, Navy planners have geared construction schedules toward elementary fueling, aviation, administrative, supply and housing installation, with full-scale refinements slated for the future.

Thus, Rota at present has an airstrip capable of receiving jet and heavy transport aircraft, a temporary facility for off-loading fuel tanker cargoes into the fuel depot, administrative and supply buildings, and semi-finished but livable quarters for officers and enlisted personnel. In addition, a number of dependent housing units have been completed for married personnel.

Ultimate mission of the Naval Base will include:

- Servicing ships and aircraft of the Atlantic and Sixth Fleets
- Replacement pool of carrier-type aircraft
- Occasional basing of carrier aircraft units
- Complete food, fuel and ammunition replenishment for ships
- Storage at the Naval Fuel Depot of ship, aircraft and vehicle fuels, and transfer of fuel to the U. S. Air Force pipeline for pumping to the inland Strategic Air Command bases.

THE NAVY'S OPERATIONS at Rota are under the jurisdiction of the Commander in Chief, U. S. Naval Forces Eastern Atlantic and Mediterranean, whose headquarters are in London. However, all U. S. military construction in Spain is being supervised by the Navy's Bureau of Yards and Docks.

Physically, the U. S. portion of Rota is divided into



five major operating areas: the Naval Air Station, the port area (actually part of the air station), the Naval Fuel Depot, the Naval Magazine, and the Marine Barracks. Joint housing, messing and recreational facilities will support all U. S. Navy and some civilian personnel.

In various stages of construction at the Naval Air Station are:

- A runway system capable of handling jet aircraft including an already completed 200-by-8000-foot runway, with extensions scheduled to be added in 1958.
- A 75-by-4000-foot taxiway including connecting taxiways.
- A 6200-foot tow-way linking harbor facilities to aircraft maintenance areas for transfer of carrier aircraft.
- A 620-by-2200-foot aircraft parking area.
- Navigation aids such as Ground Control Approach and homing beacon.
- Aviation structures including maintenance hangar, nose hangars, flight operations building, crash boat facility, parachute loft, ordnance building, communications building, fire and crash building.
- Administration and supply buildings (completed).
- A 328-by-1000-foot marginal wharf, with 33-by-2440-foot approach, for mooring vessels up to the size of USS *Forrestal* (60,000 tons).
- Finger pier for smaller vessels, 151 by 1150 feet.
- An artificial harbor dredged to a minimum depth of 35 feet; this may be increased to 40 feet in the near future.

A breakwater system employing more than 10,000 giant 8- to 25-ton concrete "tetrapods," which were first designed and used by the French, is being installed to protect Rota's artificial harbor.

THE TETRAPODS, which resemble colossal children's "jacks," are deposited on the open-sea side of the breakwater. Their odd configuration serves to break up the massive front of waves and thereby reduce the impact of wave action on the breakwater.

The Naval Magazine will store naval ammunition, and have servicing shops for projectiles and torpedoes.

The basic role of the Rota base at present is the receiving of seaborne fuel cargoes, storing them in huge underground tanks, and transferring fuel to the nearby U. S. Air Force pumping station which starts the fuel moving to the four Strategic Air Command bases connected by the 485-mile "trans-Iberian" pipeline.

The Navy's Rota fuel depot is capable of caching well over 50 million gallons of petroleum products in 28 underground and 12 surface tanks. Pending completion of a "T"-shaped fuel pier, tankers are now discharged by means of two underwater lines. The pier, when completed, will extend some 1200 feet from shore, with the crossing "T" head stretching 1600 feet.

The pier will be able to accommodate two super-tankers (more than 5,670,000 gallons each).

FUEL STORAGE ARRANGEMENTS call for accumulating Navy special fuel oil and diesel fuel for bunkering naval vessels as well as motor gasoline and aircraft fuels for local consumption. All fuels—except the Navy special—can be delivered to the Air Force pump station at Rota for pipeline movement to the USAF bases throughout Spain.

The Air Force is responsible for moving fuels through the pipeline to the four SAC bases. The entire system



STRIP FOR ACTION — View shows section of 75-by-4000-foot taxiway of the Naval Air Station in Spain.

operates much like a railroad network, complete with spurs leading to the individual bases and provision for reverse flow back to Rota. It is one of the few multi-product pipelines in the world (that is, one type of fuel can follow another through the line without extensive contamination).

From Rota, the pipeline climbs from sea level to Seville (altitude: 100 feet), site of the Moron and San Pablo SAC bases, ascends the 4000-foot Sierra Morena mountain range, descends onto the great La Mancha Plateau to Torrejon base outside of Madrid, climbs again to nearly 6000 feet over the Guadarrama range, then drops abruptly to nearly sea level into Zaragoza, location of the last air base in the chain, and the end of the pipeline.

The entire 485-mile pipeline has a fuel capacity of 290,000 barrels (12,180,000 gallons). The line "tapers" from a 12-inch diameter at Rota to eight inches at Zaragoza.

Five USAF pumping-storage stations (in addition to the station at Rota) punctuate the line between Rota and Zaragoza. These perform the dual job of pushing fuel along to the next station or side-tracking a given quantity into storage tanks in order to clear the line for movement of another type of fuel.

ROCK AROUND ROTA — Flat cars deliver quarried stone to be used in building harbor's breakwater system.





NEW FRIENDS are made while visiting church attended by Columbus at Palos, 40 miles from Rota Naval base.

A fuel consignment destined for Zaragoza traveling "non-stop" from Rota would cover the 485 miles in approximately eight days. However, the six storage stations stock all the fuel types necessary for immediate local consumption.

In all, the pipeline and connecting storage tank system in Spain will have a maximum holding capacity of 3,982,840 barrels (167,279,280 gallons).

As a multi-product pipeline, the facility makes it possible for one type of fuel, such as high-octane aviation gas, to follow immediately a flow of, say, motor gasoline which in turn may be followed by jet fuel, with only a negligible amount of contamination. The Navy Fuel Depot is also equipped for shipping fuels overland.

The fuel depot is the first portion of the entire Spanish base development system in operation.

ROTA WILL BE ABLE to house 150 single officers and nearly 1400 single enlisted men. Messing arrangements will accommodate 205 officers, 1000 men. There are provisions for additional barracks in the future. Initial bachelor housing is now sufficient to cover immediate requirements.

A total of 162 dependent housing units is available, and 90 families are already living in recently-completed homes.

For recreation and personal convenience, the Navy is building a commissary, Navy Exchange, chapel, gymnasium, library, clubs and a laundry. A school for dependent children is in operation. There will also be sport areas for baseball, volleyball, outdoor basketball and tennis. Future plans include a club house on one of the beach areas inside the base.

Besides the prime construction contractor—an American firm—there are engineering contingents from Britain, Germany and France working on the base plus over a dozen Spanish building companies. Specialists from all over Europe have been called in to handle complicated engineering and mechanical problems, particularly in the fuel pumping systems.

A number of men attached to the American construction company have worked on U. S. building jobs ranging from the Arctic wastes to the Arabian deserts; two worked in Russia during World War II.

WHEN CONSTRUCTION BEGAN in early 1954, the building crews and U. S. Navy personnel (a Navy Seabee detachment worked on the sea-loading fuel system) had to meet problems not only on the language level, but in standardizing building and construction techniques.

After nearly three years of working together, Spaniards, Americans and other Europeans on the Rota project seem to have learned some valuable lessons from each other.

The installations being built by the United States in Spain are not necessarily limited to military use. The pipeline, the harbor at Rota, the SAC airstrips, the improved public utilities, all have peacetime possibilities. And the training of Spanish engineers in large-scale construction projects is equipping them for more efficient work on Spanish civic improvements.

Frequently, the Old and the New Worlds joined forces during Rota's construction. A common sight, for instance, was a string of burros loaded with sand plodding toward a sand-washing stand, while 15-ton dump trucks rumbled past in the opposite direction carrying fill for naval base construction.

As another example, the fuel depot builders found that in mud and sand, oxen were more efficient for hauling steel sections of the underground storage tanks than were man-made vehicles.

Spanish laborers working in the massive supply warehouse were at first awed by the small but powerful fork lift cargo trucks, but within a remarkably short time, developed excellent handling techniques.

Until recently, all U. S. military personnel were living in houses, apartments and hotels in Rota and the nearby cities of Puerto de Santa Maria and Jerez de la Frontera. All bachelors and men without dependents in the area have now moved into government quarters on the base.

However, with the teeming summer vacation crowds

SAIL ON — A Spanish guide describes Columbus' route during visit to Columbus statue at near by Palos.



jamming the Rota region, the housing situation became critical. The completion of sufficient on-base quarters helped avert an uncomfortable situation.

The fact that Americans were living in the Spanish economy, and mixing with Spaniards socially, has done much to maintain the good relations existing between the two nations. Since it is important to know the Spanish language in order to get along in Spain, Americans have been learning quickly and at the same time have been developing a definite interest in the Spanish way of life.

One potential problem which had to be met was local inflation of the Spanish peseta (currently worth about 42 to the dollar). American personnel were cautioned not to pay more for goods and services than the Spaniards themselves.

In the early days, living and working on the base, by American standards, was slightly above primitive. The construction effort, naturally, has been to concentrate on development of major operational features like buildings, roads, and utilities, with little attention to conveniences such as furniture, interiors, etc.

DRIVING ABOUT THE base has been a spine-shaking dusty adventure.

Explained a hardened Navy driver to a newly-arrived shipmate:

"The thing about driving on the base here, is that you're like a ball shot into a pin-ball machine. You can see where you want to go, but the detours and road blocks keep sending you in the wrong direction. Finally you get where you want to go after a general tour of about half the base. Then, two days later, you find a whole new system of detours and road blocks."

By mid-September of 1957, the principal roads to the administration, supply, aviation, fuel depot, housing and harbor areas were generally free of work crews and some were already black-topped.

Driving in the narrow-streeted cities presented an altogether different problem for Americans with big cars. Spaniards are not generally traffic-conscious, and the variety of transportation using the roads and streets (bicycles, burros, oxen, mules, horsecars, vintage automobiles, giant industrial trucks, small European cars) guaranteed that the American driver would not fall asleep at the wheel.

Most of the smaller cities have no traffic lights and have traffic policemen only in the main squares. Driving past intersections is a horn-blowing hazard. Almost everybody has some sort of a sixth sense developed for the road.

One can never tell when a burro or cyclist will suddenly loom up in the middle of the road around the next bend. And the "two way" streets in most towns seem to have been measured for the narrow passing of two Roman chariots. Many an American in a Detroit product has had to maneuver in reverse to extricate himself from a near jam—with much sideline coaching by Spanish spectators.

THE WEATHER OF southwestern Spain is sub-tropical and semi-arid. Summer heat, radiating from a generally cloudless sky, sometimes goes as high as 110° F. Cooling sea breezes at Rota, however, tone down the temperature to the high 80s or low 90s.

The worst climatic situation is the "Levante," a hot,



MARINES arrive at Rota where they will serve as security guards for the Navy air-sea base being built.

dry wind which occasionally blows up from Africa's Sahara desert. When it blows, it blows consistently—sometimes reaching a velocity of 40 miles per hour, straining nerves and tempers. At Rota, the Levante carries driving sand from the nearby beaches and the areas under construction.

The time-honored Navy expression—"snowed"—has been altered at Rota to "sanded."

Maintaining the link with Port Lyautey, and also with the U. S. military headquarters in Madrid, is an R4D (C-47) transport. This hardy twin-engine plane known as the "Toonerville Trolley" operates a three-times-a-week schedule on the Rota-Madrid-Port Lyautey circuit.

Besides flying passengers, mail and military cargoes, this plane also delivers fresh (re-constituted) milk, bread, frozen foods, canned goods, and household necessities to Rota's Navy Exchange. When a plane manages to deliver a load of milk, it is usually sold out within a few hours.

There is a variety of recreational facilities—and more to come. The nearby beaches are as good as or even better than many American beaches; private clubs offer membership to Americans and provide sports like tennis and yachting; an undeveloped part of the base is being used as a skeet shooting range; hunting is possible by invitation from land-owners.

THEN there are native Spanish diversions like the Sunday (and holiday) bullfights, frequent folk festivals featuring native flamenco dancing, and the simple relaxation of sitting at an outdoor cafe, sipping the excellent product of the local vineyards, and watching the Iberian world pass by.

Navy men with automobiles have been combing the surrounding countryside, which is rich in the history of the basic forces which helped mold our western civilization. Within a hundred-mile radius of Rota, one can view traces of the epochs which shaped Spain: Phoenician settlements, Grecian trading posts, Roman fortresses, Moorish castles, Spanish imperial palaces.

The naval base at Rota, with its potentially vital contribution to defense, is a historical development out of the hazardous voyage of the three ships which Columbus led into the unknown west 465 years ago.

TAFFRAIL TALK

WE TRY IN EVERY WAY to make the information that appears in each issue of *ALL HANDS* the latest material available. However, in this age when scientific barriers are being constantly smashed, the task is becoming increasingly difficult.

For instance, look through this issue devoted to Naval Ordnance and see if you can find more than a bare mention of the missile *Corvus*, or of *Green Quail* or *Bull Goose*. You won't, because it was announced after the magazine was ready for the printer and only in time to be included in this column.

Corvus is the latest addition to the Navy's family of missiles. It is an air-to-surface missile that will be used by carrier-based aircraft to penetrate heavily defended areas, or for striking at surface ships. You might compare it with a boxer's left jab which he uses as a "stick" to smash repeated blows into the opponents' face while staying out of counter-punch range.

Another Navy missile which has received a great deal of attention in the press recently is *Polaris*. The Navy has announced that *Polaris*-launching, nuclear-powered submarines will carry more than 10 of the missiles designed for submerged launching.

The feasibility of submerged firing of a solid fuel rocket has been confirmed by tests conducted since 1946 and '47, including the firing of a solid fuel missile test vehicle from under water.

It has been pointed out that, once a *Polaris*-bearing nuclear-powered submarine goes to sea no one will see it again until it returns. It will stay submerged during the entire cruise and, so far as a potential enemy is concerned, he must consider every U.S. submarine at sea the *Polaris* vehicle.

Detection of the submarine carrying the IRBM missiles will be very difficult. Once it leaves port it will proceed submerged to a sea station where it will hover or maneuver at very low speed. From this station it will be able to launch its missiles at a number of targets. An enemy will be able to guess what points will be the targets for these submarine-launched missiles, but it will be nearly impossible for him to counteract the missiles once they are in flight for the exact point of launching, a vital factor in anti-missile planning, will be unknown.

Polaris accuracy is dependent on exact ship navigation and for that purpose an inertial navigation system for ships has been developed in experiments aboard *USS Compass Island* (AG 153). The *Compass Island* developments exceeded Navy expectations and another backup navigation system has recently given excellent results.

Another ship, *USS Observation Island* (AG 154), is also being used for work on the navigation problem and will be used for launching tests. A submarine missile system will be duplicated in *Observation Island* for the launching tests.

There were also two Air Force missiles which were announced too late to be covered in the *Service Scope* Section, *Bull Goose* and *Green Quail*.

This column is usually the last word in the magazine, but you can bet your sea boots that this is not the last word in the development of naval ordnance.

The All Hands Staff

The United States Navy

Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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The Bureau invites requests for additional copies as necessary to comply with the basic directive. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

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• AT RIGHT: FRAMED — Crew member of *USS Cascade* (AD 16) is seen through hatch as he stands after gangway watch. The destroyer tender was moored at Newport, R. I.

ALL HANDS



details at sea



★ ★ ★ **our scientific electronic
navy needs men
who know their jobs** ★ ★ ★

ALL HANDS

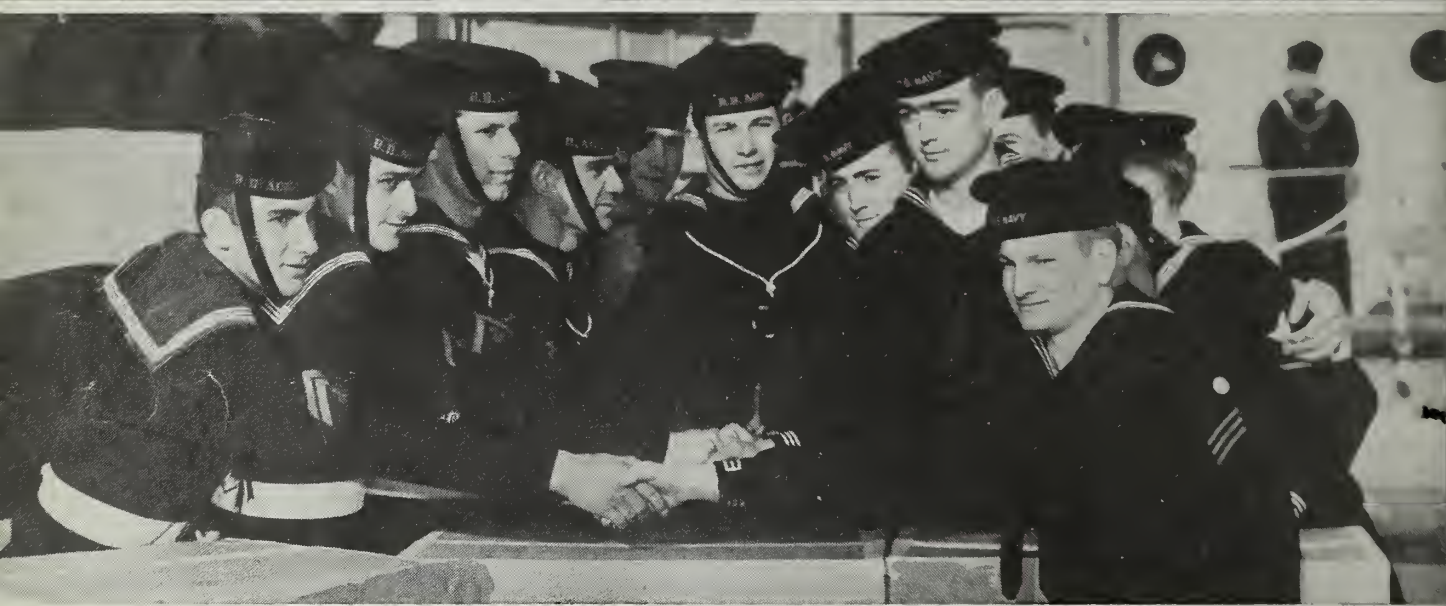


people to people
THE FRIENDLY FLEET

This magazine is intended
for 10 readers. All should
have as soon as possible.
COPY ALONG

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MAY 1958





ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

MAY 1958

Nav-Pers-O

NUMBER 496

VICE ADMIRAL H. P. SMITH, USN

The Chief of Naval Personnel

REAR ADMIRAL J. R. LEE, USN

The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN

Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor

John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdel, News

David Rosenberg, Art

Elsa Arthur, Research

French Crawford Smith, Reserve

Don Addor, Layout

• **FRONT COVER: WORLD-WIDE FRIENDS** is the theme of this month's issue. To illustrate our point, we couldn't resist a reprint of this Navyman and Korean friend, who first appeared in the April 1956 issue of *All Hands*.

• **AT LEFT: WORLD-WIDE FRIENDSHIP**—Top: Children of Far East find new friend. Friendly business at Port Lyautey. Greetings in Japan. Center: Greek and U.S. Navymen join in handshaking. Sailor toasts Bavarian friends. Bottom: Scotsman and Navymen have good time with bagpipes. Arab friend shows sailor how to use water pipe. French and U.S. sailors chat.

• **CREDITS:** All photographs published in *ALL HANDS* are official Department of Defense Photos unless otherwise designated.



HAVE SMILE, WILL TRAVEL — Four of Navy's "ambassadors-at-large" are smiling representatives of Friendly Fleet.

HERE'S THE FRIENDLY

AT SEA OUR JOB IS TO ACHIEVE A PEAK OF COMBAT READINESS. IN PORT OUR MISSION IS TO PROMOTE INTERNATIONAL UNDERSTANDING AND FRIENDSHIP. IN BOTH CASES OUR OBJECTIVE AS THE FRIENDLY FLEET IS TO MAINTAIN THE PEACE.

"WHILE OUR COMBAT READINESS REASSURES OUR FRIENDS AND DISCOURAGES POTENTIAL AGGRESSORS, I BELIEVE ALL WILL AGREE THAT THE BEST AND MOST ENDURING ROAD TO PEACE IS MARKED BY SUCH THINGS AS GOOD WILL, UNDERSTANDING, CO-OPERATION, ACCEPTANCE, TRUST, FRIENDSHIP AND MUTUAL RESPECT."

This was part of a message from Commander Sixth Fleet to every officer and enlisted man in that command. Other messages, stating the same basic ideas in different ways, have been issued to Navy commands all over the world, pointing up the fact that every Navyman plays a significant role in an effort that's important not only to the Navy, but also to the entire nation.

This is the People to People Program, and its basic aim is, "to build

a massive program of communication between Americans and the citizens of other lands—to establish lasting two-way relationships from which international friendship and understanding could grow."

Besides Navyman, members of the other armed forces, businessmen, entertainers, scientists, educators, farmers, labor officials—in short, Americans from all walks of life—have joined in.

Why?

Well, this the way the President put it when the program was getting started back in 1956;

"If our American ideology is eventually to win out in the great struggle being waged between opposing ways of life, it must have the active support of thousands of independent private groups and institutions and millions of individual Americans acting through person-to-person communication in foreign lands."

The Navyman has a key role to play in this operation, for he's likely to come in contact with more people

from foreign countries in just one year of sea duty than most other Americans are likely to meet in a lifetime.

Often, the Navyman and his actions are part of the foundation upon which a foreigner may build his impressions of America and Americans. And, these days, such impression are becoming increasingly important.

Actually, the Navy has been in the people-to-people business for quite a few years. As a result, we've managed to make good impressions on many people and in many ways by extending the notion of "the Friendly Fleet" to all our Fleets everywhere.

Sometimes, this has been done on a pretty large scale. For example, take what we did in the state of Vietnam, Indo China back in 1954.

In case you've forgotten, that was the year when the Communists took control of the northern half of Vietnam. Under the terms of an armistice, 300 days were allowed for the evacuation of thousands of Viet-

namese civilians who wished to leave the communist-controlled part of the country for freedom in the southern part.

An appeal for help, in what has been described as "history's greatest mass civilian evacuation," went out to the United States. Our answer, in the form of more than 40 amphibious vessels of the Pacific Fleet, wasn't long in coming, and soon these ships were shuttling from Haiphong, in northern Viet-Nam, to Saigon, in the southern part, loaded to the gunwales with Vietnamese men, women and children.

Many of these refugees had had very little previous contact with Americans, and only a small percentage of them had ever been on a ship before. Now, the fortunes of war had driven them from their homes and placed them on board American ships and among American sailors.

Naturally, with so many people crowded into such unfamiliar surroundings, some problems were bound to arise, but both the Navy-men and the refugees did their best to minimize these difficulties as soon as they occurred.

The first ship to leave Haiphong

The handling of the food situation on board *Menard* shows how tact and a commonsense understanding of differences in customs and habits can be used to bridge the gap between people of divergent backgrounds. In addition, there were other situations during the Passage-to-Freedom operation in which just plain neighborliness and the Navyman's ability to do the right thing in an emergency were big factors in giving the Vietnamese a good impression of Americans. This was especially true of the Navy doctors and corpsmen, whose services ranged from delivering babies to removing shrapnel from the leg of a Vietnamese girl who had been wounded by a land mine.

One of these hard-working men in white was John A. Osborn, HM3, of *USS Bayfield* (APA 33), who was on duty in sick bay one morning when a frantic woman rushed in with her two-month-old baby girl in her arms. The baby, stricken with acute bronchial pneumonia, had stopped breathing.

Osborn, all alone in the sick bay, saw that the baby had turned blue. Knowing there wasn't a minute to spare, he quickly grabbed a cardboard box, dumped out its contents and set it upside down on a table.

In a matter of seconds he had converted the box into a make-shift oxygen tent by taping cellophane over the top and punching a small hole in the end. Then, he placed the baby in the box and turned on the oxygen. Before long she began to breathe. Her color returned to normal.

After the doctor arrived an oxygen mask replaced the "Osborn tank," but Osborn remained on the scene. He, a Vietnamese midwife and a male nurse stood by the child and oxygen mask throughout the night to make sure nothing went wrong.

Chances are the mother of that baby will remember for a long, long time that Americans are pretty nice people.

In other emergencies, on a much smaller scale than the Vietnam evacuation, other Navymen have made

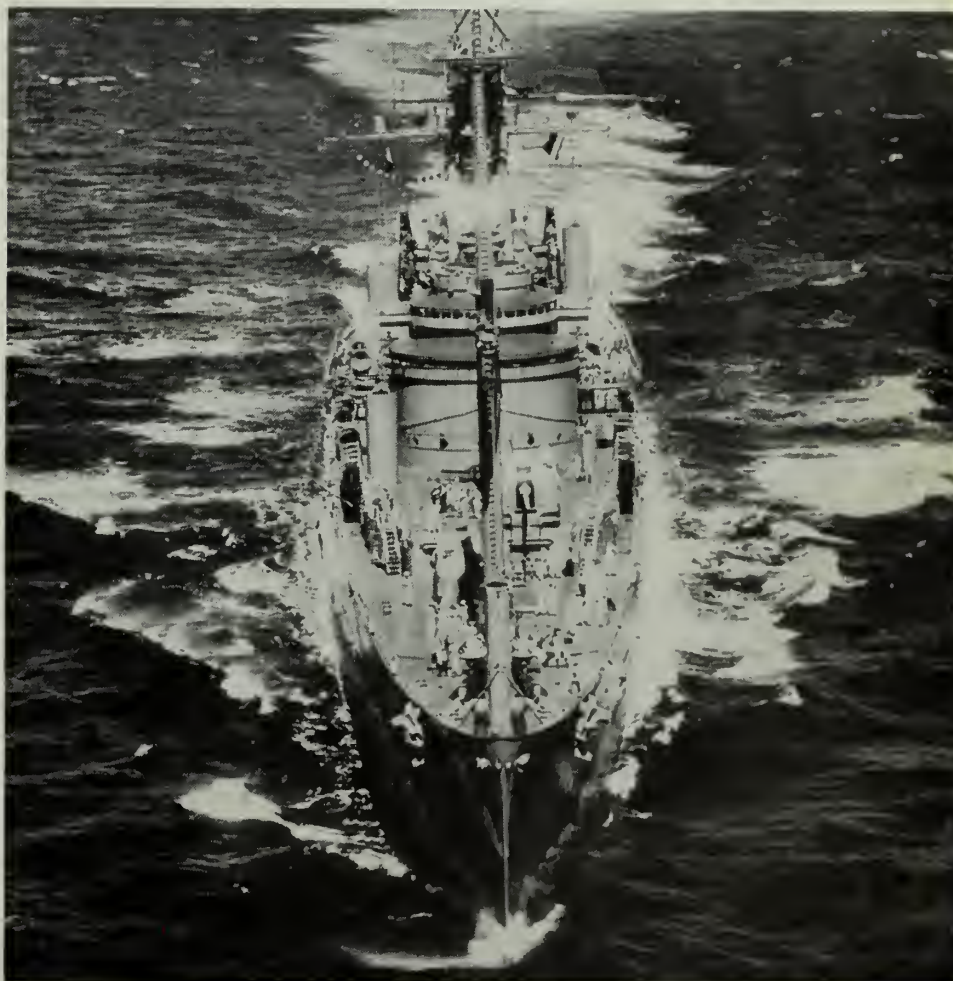
FLEET

with a load of evacuees was *USS Menard* (APA 201). She served as a "guinea pig," keeping the flagship for the operation, *USS Estes* (AGC 12), informed of her problems as they came up. *Estes*, in turn, passed the word on to the other ships involved so that similar difficulties would be easier to avoid in the future.

On her first trip *Menard* carried 1802 passengers, and she had hardly put to sea when she "hit a snag."

The refugees were not used to the way Navy cooks prepared rice, the main staple of their diet. Nor, did they care for American-style food.

One of the evacuees, a priest, came forward with a solution. Serving as a translator, he rounded up five of the passengers to serve as cooks for the remainder of the trip. The volunteer cooks prepared huge batches of rice every day, and according to a dispatch from the ship, there was a noticeable increase in the pep and vitality of the passengers within two hours of the first Vietnamese-style meal.





similar impressions on people all over the world. For instance, here is a letter received by the office of the Commander, U.S. Naval Activities, Port Lyautey, Morocco, after a helicopter from there had rescued the crew of a steamship in trouble in

waters off the coast of Casablanca:

"Cancale, France

Friday, 13 December 1957

In the name of the families of all the crew members of the Pei-ho, I would like to address to the pilots of the helicopters who contributed

to their rescue, the expression of our profound gratitude. May they rest assured they have our heartfelt thanks.

I would like to wish them all a long and happy life.

E. Turpin

Mme Pierre Turpin

*Cancale, Ille et Vilaine
France"*

In a younger scrawl, this unsigned note had been added:

"From the children of the crew members of the Pei-ho—Elisabeth, Jean-pierre and Yves Turpin say to all of you: Thanks for having kept us our papa."

Help in emergencies is only part of the story of "the Friendly Fleet." Parties for underprivileged children, athletic competition against foreign teams, visits with relatives "in the old country," participation in local ceremonies and celebrations, blood donations to foreign blood banks, the exchange of official calls and entertainment and the support of overseas charities also make for favorable impressions of us in foreign ports. Even a band concert can do a lot toward the building of international understanding, as witness the success of the Seventh Fleet Band in Japan and the band from *uss Coral Sea* (CVA 43) in the Mediterranean area.

In the civic auditorium at Sasebo, Japan, the Seventh Fleet musicians played to an overflow crowd of more than 1600 people who turned out for a two-hour program of concert and

PARTIES FOR ORPHANS have become important part of Fleet's visits abroad. Above: Navymen meet Spanish Matador.



dance band numbers. Portions of the show were recorded for broadcast over the Nippon Hoso Kyokai, largest broadcasting network in Japan, and the network also interviewed the leader of the band, Ned Muffley, MUI, USN, to find out more about the band's organization and background. When the concert was over the audience refused to let the group leave the stage without an encore, and as the band members were leaving the auditorium they were met at the exits by crowds of Japanese youngsters waving programs and asking for autographs.

The *Coral Sea* band (see ALL HANDS, June 1957) made a triumphal tour of Sicily, Italy, Greece and Turkey. In Istanbul more than 4000 fans jammed the Sports Palace to hear it play numbers ranging from the latest in rock n' roll to the hit ballads of a decade ago. In Genoa's austere Piazza della Vittoria middle-aged matrons danced in the streets to the bands selections. In Athens, bandleader Walter N. Ridge, MUC, USN, ran into a problem: a stamping crowd of 8300 people didn't want the musicians to stop after three hours of continuous playing. And, in Palermo a throng of 7000 people kept the band playing for five hours. A Palermo newspaper described the throng as "one of the largest crowds we have ever seen in Piazza Castelnova."

Band concerts, rescues at sea and the like are group efforts, but the real key to making a good impres-



sion in a foreign country is the individual Navyman, who sometimes can make a very large contribution to international understanding entirely on his own. For example, here is what just one Navyman accomplished by being a good neighbor.

The story began in 1949, when Dr. Toru Miyaji, pathologist at Osaka National University in Japan, was invited to the United States to study at the American National Cancer Laboratory. While in America the Japanese doctor lived in a suburb

SHOWTIME—Spanish perform for USS *Northampton*. Above: Vietnamese baby delivered during evacuation.





TOOT SWEET—Navy musicians make friends quickly with concerts in foreign lands. Two Navy bands blow into town.

of Washington, D. C., and by coincidence, his next door neighbor was William L. Jones, then an HMI, USN. Jones and the doctor soon struck up an acquaintance, from which a friendship grew.

One day, Dr. Miyaji jokingly asked Jones to come to Japan to help him set up a laboratory patterned after the one at the National Naval Medical Center, Bethesda, Md.

"Sure—anytime," was Jones' bantering reply.

Time passed, and eventually Jones wound up in the Far East with Fleet Epidemic Disease Control Unit No. 2. Dr. Miyaji, by then back at Osaka University, learned of Jones' assignment and got in touch with the corpsman's CO to ask if Jones could be permitted to help him set up laboratory procedures for the Osaka

Medical School's Central Clinical Laboratory.

Permission was granted by the Commander Naval Forces Far East, and the casual remark made back in 1949 became a reality five years later.

While in Osaka, Jones taught Japanese medical technicians the same "tricks of the trade" he had learned in the Navy, and he did such an effective job that it attracted much attention among medical circles in Japan. According to Dr. Miyaji, Jones had "done a three months' job in one month—despite the language barrier."

Of course, not everyone in the Navy has a chance to do what Corpsman Jones did. And, naturally, the Navy doesn't expect everybody in the Fleet to run right out and give band concerts all over the place just because of the People to People Program.

However, it does feel that there's a lot more room in this world for friendships like the one that men of the *USS Brough* (DE 148) struck up with the people of Dunedin, New Zealand, during the 1956-57 phase of Operation Deep Freeze.

The meaning of that friendship, and of the entire people-to-people idea, is pretty well summed up in this Christmas editorial from the *Dunedin Evening Star*:

"MERRY CHRISTMAS TO USS BROUGH"

"It is worth noticing the valuable goodwill mission which is being performed by the ship's company of *USS Brough*, which for the past two or three months has made Dunedin its base. It is safe to say that the

PASSAGE TO FREEDOM made a listing impression on thousands of Vietnamese who were carried safely aboard some 40 amphibious ships of Pacific Fleet.



young officers and crew, under their friendly and courteous captain, LCDR W. P. Duhon, have established here a reputation for conduct which has not been surpassed by any visiting naval vessel.

They have made many friends among our citizens, who have been happy to welcome them into their homes, and American sailors will sit at many a Dunedin Christmas dinner table tomorrow.

... When individuals of the nations get together as man to man it is usually found that one human being is pretty much the same as another. It is more or less a matter of trying to see the other fellow's point of view and remembering, as all of us are inclined to forget at times, that there are two sides to every question.

So far as the British and American peoples are concerned, it was never more important, in the interests of peace, that they should put aside any differences that divide them. In a small, but important, way the ship's company of USS Brough has been doing its bit to achieve this end.

It is no uncommon thing for servicemen ashore in a strange country to kick up their heels, even to the extent of trying the patience of their hosts, as many New Zealanders can testify, but no such complaints have been heard of the men of Brough. Maybe their youth has something to do with this, but whatever the reason, it is most welcome—as are they.

It was in keeping that the first wish of Commander Duhon, when



VISITING DIGNITARIES—Two schoolgirls from Yokosuka, Japan, sample cooking on USS Castor (AKS 1). U. S. Navy sailor does honor with knife and fork.

his ship returned to Dunedin on Saturday after another spell in the southern ocean on Operation Deep Freeze duty, was to issue a message of Christmas greetings to the people of Dunedin. We take this opportunity, on behalf of the citizens, to say

to the men of Brough: A Merry Christmas and a safe return to your homes when your tour of duty in this part of the world is over."

Maybe Brough ought to be made one of the flagships of the Friendly Fleet.

—Jerry Wolff

BROTHERS-IN-ARMS—Navy men pose with Thai friends in Bangkok (left), and with French sailors at geedunk (right).





FROM ONE PEOPLE TO ANOTHER—USS *Henderson* (DD 785) heads for northern Ceylon with load of relief supplies.

DISASTER RELIEF TEAM

THIS IS THE TALE of three ships—an aircraft carrier and two destroyers—that steamed into the heart of a nation through a door opened by disaster.

The nation was Ceylon, ravaged early this year by devastating floods caused by torrential rains. The ships were USS *Princeton* (CVS 37), *Henderson* (DD 785) and *Southerland* (DDR 743), all units of the Pacific Fleet operating in the Western Pacific.

Reservoirs and rivers of this island country lying within 10 degrees of the equator, had overflowed taking the lives of some 250 and leaving 300,000 homeless, without food, and easy prey for diseases of epidemic proportions. The onrushing walls of water had caused property damage estimated at \$105 million. But aid was on the way, coming from agencies of the United Kingdom, India, and the U. S. Navy.

Many miles to the north in the

South China Sea, *Henderson*, *Southerland* and *Princeton* were conducting war-like ASW training operations. On 28 Dec 1957 they received word to proceed at best possible speed to Singapore, Malaya, to fuel and take on emergency supplies for Ceylon relief work. Turns for 26 knots were rung up, and a short time later a representative of the American Embassy was at the home of Ceylon's Prime Minister informing him that help was on the way in the form of the U. S. Navy and asking "what else can we do?"

Arriving at Singapore at dusk the destroyers went alongside the Norwegian tanker ss *Naha* to take on fuel. The carrier loaded medical and food supplies and late in the evening, three British helicopters with their crews came aboard to augment the ship's 28 choppers. Some 400,000 pounds of food were crammed into the hangar bays aboard *Princeton* along with 3000 pounds of medical

supplies as the loading operation continued on into the night.

Henderson completed fueling and headed to sea before dawn with *Southerland* following a few hours later. *Princeton*, capable of greater sustained speed, departed last, but caught up with the two DDs as they ran through the Malacca Strait. The three then headed across the Bay of Bengal toward Colombo, capital city of Ceylon.

While the three ships were on their way, President Eisenhower sent a message to the people of Ceylon and announced his order for the three-ship mercy mission. An area commander sent the United States ambassador a message extending the sympathy of the U. S. Navy to the country and informing him that the ships, aircraft and men of his command were standing ready. "We are theirs to command in this, their hour of need" was the concluding sentence of the dispatch sent by the Navy.

During the three-day run toward Colombo the two destroyers prepared every item of medical supplies which might be useful for transfer to the carrier as well as all available dry stores in excess of two weeks' supply. The medical stores were passed to *Princeton* when the destroyers went alongside for fuel, but the dry stores were retained on board for delivery in Colombo.

On board *Henderson* a volunteer Disaster Relief Team was formed, ready to offer services wherever needed. Supplies were prepared and the crew of volunteers polled in search of the variety of skills that would be needed. Men with previous experience as linemen, plumbers and carpenters stepped forward along with the shipfitters and communicators. Equipment such as portable welding gear and radio equipment was laid out along with clothing and emergency rations. Elaborate plans were made for operations ashore and for maintaining communication with the ship. Two days before arrival in Ceylon, the services of this group were offered to the Task Group Commander.

Within sight of Colombo, *Princeton* was diverted to Trincomalee, a small community on the northeast coast of Ceylon, where flood relief was most critically needed and her helicopters could be most effectively used. *Southerland* and *Henderson* proceeded into Colombo and moored at Queen Elizabeth Quay. As they came alongside, the dock was deserted, but as the last line went over thousands poured onto the dock to welcome the relief ships which had arrived hours ahead of schedule.

Ceylonese sailors and navy trucks came on the pier to assist in the off-loading of the dry provisions collected on the two DDs. *Henderson* contributed 4000 pounds and *Southerland* made a similar contribution which was later broken down into small units for distribution to individual families in the stricken areas.

At dawn the next day trucks rolled onto the quay carrying tons of supplies destined for *Henderson* and *Southerland* deck spaces and a sea voyage to flood victims in the Trincomalee area. All morning, Singhaese stevedores loaded sugar, tea, pulses, rice and dried fish, all items necessary to the Ceylonese diet.

Storing this cargo was delicate work, for 60 tons of topside weight can make a tremendous difference



RELIEF SHIP—USS *Henderson* (DD 785) loaded relief cargo at Colombo. Below: USS *Princeton* (CVS 37) "choppers" delivered emergency supplies.

in the stability of a destroyer. It had to be lashed securely to the deck and bulkheads, and covered with all available tarps, gun covers and other canvas to protect it against sea spray.

With the vital cargo aboard, the two destroyers began the 400-mile trip to Trincomalee, steaming between 22 and 25 knots to arrive at first light. The moderate seas caused the two ships to roll and recovery was slow and sluggish. The sleek destroyers were now workhorses and no matter how hard they tried, they acted like trucks.

By this time a four-engine Navy transport plane had landed at Colombo with a special medical team from the Preventive Medicine Unit,



Third Marine Battalion, on Okinawa, and 12,000 pounds of medical supplies. The R5D transport arrived in Ceylon the day after its squadron, Fleet Tactical Support Squadron 21, had been alerted.

The supplies and medical personnel went to Jaffna, the first area to receive U. S. assistance. Forty Sing-

SINGHALESE STEVEDORES unload dry supplies from a U.S. destroyer. Two DDs each contributed about two tons of food to Ceylon aid programs.



halese were later evacuated from Jaffna to Colombo.

Navy and Marine helicopters attached to *Princeton* made 132 flights, delivering more than 90 tons of supplies to various disaster areas. After 12 hours of continuous delivery, flight operations were temporarily stopped with only eight tons remaining aboard.

The two destroyers went alongside the China Basin fuel pier at Trincomalee where the unloading operations commenced. Although stevedores worked rapidly, it took until late afternoon to remove the last bag and box into barges alongside.

Princeton and the two destroyers had been transferred to the operational control of CINCNELM who placed them under the command of the Commander Naval Forces, Middle East, who was in the *uss Duxbury Bay* (AVP 38). The small seaplane tender arrived at Colombo shortly after the destroyers completed their offloading. RADM Harold M. Briggs, USN, COMIDEASTFOR, made an immediate inspection of the area and after conferring with

the Ceylon National Flood Relief Committee declared the emergency at an end. Flood waters were receding, food and medical supplies distributed, and aid was being given to prevent further widespread suffering among the people of Ceylon.

The final bits of supplies were unloaded from the carrier just nine days after the 33,000-ton ship had been ordered to the area. A Navy medical team which had been flown by helicopter to a village near Polonnaruwa with 150 pounds of medicine, was brought back after spending two and a half days in the area. The team visited refugee camps in the interior of Ceylon, many sheltering groups of more than 1000 people. Colds and influenza symptoms were prevalent and the team directed by Chief Hospitalman Clarence W. Veach, USN, administered medicines and reported the need for mass immunization. In the area of Mutur, LT Charles B. Gwinn, MC, USN, assistant medical officer aboard *Princeton*, gave approximately 2500 immunizations in a 10-hour period. Additional medical teams had reached other

areas of Ceylon affected by the flood waters and in the south personnel from *Duxbury Bay* were working in the less seriously flooded areas.

Following the arrival of *Duxbury Bay*, *Southerland* was ordered back to the Philippines and two days later *Princeton* was approaching Colombo with *Henderson* acting as plane guard. A flight of S2Fs and a squadron of helicopters roared over the capital city in an impressive flyover. A short time later the carrier and the destroyer anchored in the harbor for a two-day good will visit.

The President of the United States said in a message to the Secretary of the Navy: "Please pass my congratulations and thanks to the officers and men of our ships and aircraft units which have done such a magnificent job in aiding our friends in Ceylon to recover from the disastrous floods which so tragically struck their country.

"It is always a pleasure to see our military forces being employed so effectively for peaceful and humanitarian purposes. Well Done."

—William Prosser, JOC, USN.

Navy Goes to a County Fair, Saipanese Style

Throughout the world, the words "County Fair" have come to mean a time for fun and laughter, and usually a state of noise and chaos for children and older folks alike.

The 1958 Saipan County Fair was no exception. The picturesque ruggedness of the country provided the background for its festival.

The Saipanese people, laden with their farm vegetables, fruits, cattle, and native handiwork, traveled via jeep and oxcart to Chalan Kanoa, principal village on the island and site of the Fair. They carefully unloaded and arranged their produce

and merchandise for sale and for all to observe.

Military and civil service personnel on the island as well as the islanders themselves turned out in great number to shop and witness the fine array of merchandise which ranged from carefully woven napkins to shell jewelry and heads carved from coconuts. These were typical of the craftsmanship of the people.

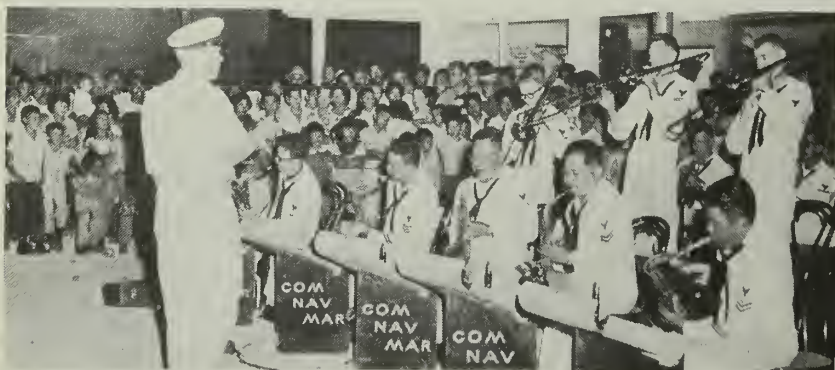
The Navy began its wide-scale program of rehabilitating the island and its people shortly after the island was won back in WW II. The island, built up into an immense

military base, provided extensive employment for the people. The income derived by the community from government employment was spent on imported foods and other commodities which greatly helped the people in their efforts toward rehabilitation.

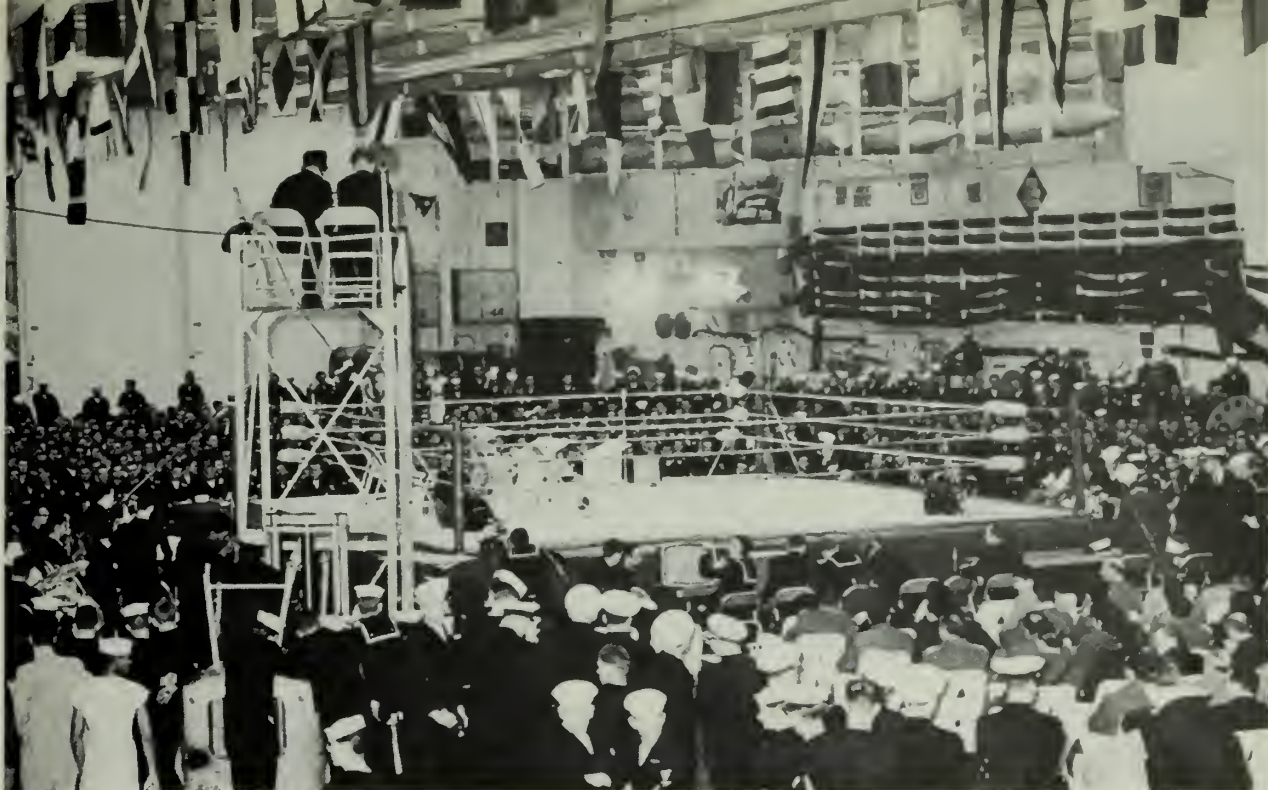
Although in 1950 many of the military installations closed, the naval administration continued and went on to provide hospital facilities, an island power plant, an agricultural experiment station and an outstanding educational system. The close relationship and friendliness between the Saipanese people and the Navy continue today.

One of the highlights of this year's Fair was an afternoon concert given by the band of Commander Naval Forces, Marianas. It was flown to Saipan from Guam for the occasion. The band's music captured the interest of the people from the start.

At night, the band provided the music for a street dance which again attracted huge throngs of people, and gave the islanders an opportunity to display their dancing abilities which ranged from the traditional waltz to the present-day rock 'n roll. —Robert J. Bova, JO3, USN.



FAIR FUN—Highlight of Saipan's County Fair was an afternoon concert and evening dance music played by ComNavMar Navy band that was flown in.



STACKED DECK — Hangar deck of USS Saratoga (CVA 60), packed with enthusiastic audience during NATO smoker.

NATO Meets SARA

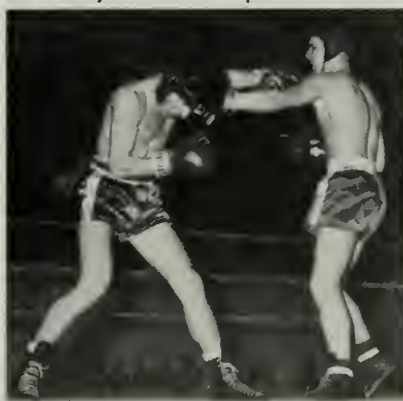
A BIG U.S. WARSHIP introduced herself in a big way to NATO members of Allied Forces Southern Europe headquarters. The big ship was USS Saratoga (CVA 60). The big way was with a slam-bang "smoker" held for NATO officials and their wives on her two-acre hangar deck.

The program to honor *Saratoga's* first stop at Naples since adding her might to the U.S. Sixth Fleet in early February was highlighted by an eight-bout fight card featuring sluggers from *Sara* and her accompanying ships. Preceding the fights the NATO guests were feted by hillbilly bands, jazz combos, vocal groups, magic acts and a Navy dance band.

The evening's entertainment was transmitted throughout the ship on WCVA-60, *Saratoga's* closed circuit TV system. Along with providing entertainment, the TV network pipes training films and flight operations to crewmen assigned duty below decks.



SHOW ENOUGH — Boxing highlighted the Navy show at Naples. Above: 'Ranch Boys' added western flavor to Med.





OILER TURNED TUG — AO 148 steams to the rescue of merchantman caught between two typhoons in Pacific.

Navy Lends Helping Hand

A TYPHOON TO THE RIGHT, a gale to the left. Ahead is a 7600-ton Panamanian merchant ship drifting helplessly on the rolling Pacific Ocean. Your orders are to render assistance to the merchant vessel, but you are not commanding a giant Fleet tug, not even a small one. Your ship is a heavily loaded Fleet oiler displacing about 34,000 tons.

If you were standing on the bridge how would you render assistance? Would you take off her crew to leave the ship abandoned on the wide sweep of the ocean? Or would you steam to the helpless ship and take her in tow, letting the unlimited capabilities of your crew make up for the lack of specialized equipment?

The latter course is the one steamed by CAPT W. R. Wilson, USN, former commanding officer of USS *Ponchatoula* (AO 148), after receiving orders to assist SS *Venus*. The tanker's crew responded with good seamanship and for 54 hours the Navy ship towed *Venus* across the Pacific without damage, injury or unexpected incident. Captain Wilson isn't sure, but he suspects that this tow may be the first for an AO type ship.

Ponchatoula, out of Long Beach, Calif., was steaming at 17.5 knots for Sasebo, Japan, when she received a message order to go to the assistance of *Venus*. The steamer was 160 miles to the southeast, rolling in rough seas after losing her propeller.

About 360 miles to the south was a gale growing rapidly to typhoon force and size and 1300 miles to the west, Typhoon Harriet was moving steadily north and eastward.

Venus had loaded coal at Norfolk, Va., and was en route to Yawata when the propeller casualty occurred and the Panamanian freighter had to radio for help. Language problems immediately cropped up as *Ponchatoula* turned her bow toward the crippled ship. It took two hours of constant broadcasting by the radio gang to learn that she was 450 feet long, displaced 7631 tons and was built in Chester, Pa. The crew on the merchant ship was Filipino and her "communication gang" consisted of one man who doubled in radio and on the signal bridge.

With *Ponchatoula* steaming toward the drifting ship the first lieutenant, Lieutenant Wesley H. Singletary, USN, and his assistant Chief Boatswain Ernest L. Dexter, USN, reviewed the towing bill (issued earlier that year when the oiler was commissioned) with the crew. Details of picking up the helpless ship lying in the trough of a medium to heavy sea were gone over and the towing gear laid out. Down in the engineroom everything was double-checked to insure that nothing would fail during the delicate maneuvers ahead. By the eight o'clock reports all departments reported "ready for towing" to the captain.

The deck force had fabricated a

messenger line consisting of 50 fathoms each of nine and 21-thread line, three-, five- and eight-inch line, all joined together by taper splices made up by the boatswain's mates. The small end of this messenger was led out through the stern chock where the eight-inch line was faked down, led forward and stopped off on the life line and the rest faked down free for running to starboard. The eight-inch messenger was shackled to the outboard end of the 145 fathoms of 2¼-inch tow wire. Mauls, tackle, shackles, heaving lines, line-throwing guns and stoppers were also readied.

While these preparations were being made, ocean station ship *Victor*, a Coast Guard vessel, had started steaming for the west edge of the station area to be close by if needed. USS *Yancey* (AKA 93), also in the area, was ordered to give all assistance possible, but the nearness of *Ponchatoula* made this unnecessary.

Shortly before midnight *Ponchatoula* lookouts sighted the lights of *Venus* and the ship hove to about 2500 yards astern of the merchant ship. Radio discussions revealed that the Panamanian freighter did not have any towing gear other than her anchor chain.

At 0600 the Navy tanker was ready to tow the wallowing merchant ship, but was forced to wait when it became apparent that *Venus* had not readied any of her gear. Two

hours later the merchant crew had unshackled the anchor and suspended it on the round of the bow and were ready to receive the messenger.

As soon as *Venus* was ready *Ponchatoula* began her approach from the port quarter. It was CAPT Wilson's intention to cross the *Venus* bow at a distance of about 100 yards. The quartermaster's notebook shows that at 0748 the tanker came ahead one-third (five knots) on a course of 025°. As the range decreased to 1400 yards the heading was decreased to 029° and then to 021°. At 0808 the range to the *Venus* port quarter was less than 100 yards and both engines were reversed to check the ship's forward motion. While passing about 50 to 75 yards off the port bow, the Navy



on the High Seas



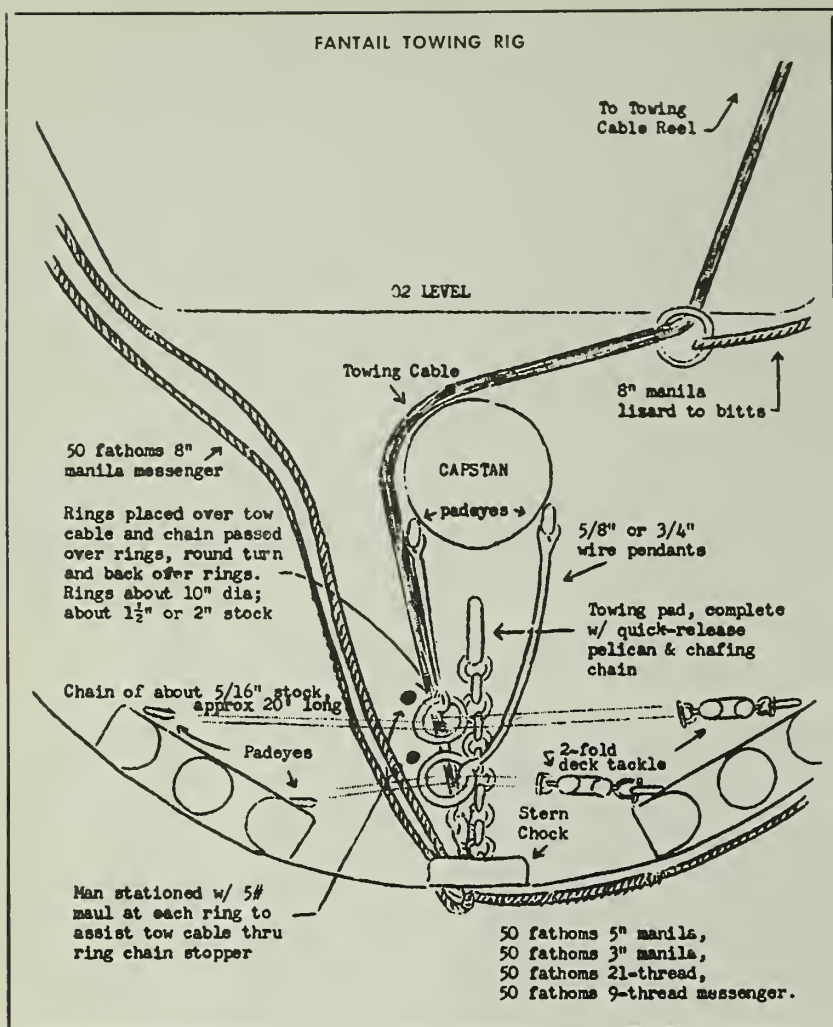
deck gang fired a gun line messenger over to *Venus* at 0811.

The nine- and 21-thread messengers were quickly drawn across to the forecastle of *Venus*, followed by the three-inch line and then the crew began cutting away the stops holding the five-inch messenger. The tanker continued across the bow of the becalmed merchant ship and took up station slightly on her starboard bow. Delicate use of her engines allowed the tanker to maintain a distance of no more than 200 yards.

According to the *Ponchatoula* log, *Venus* had the five-inch messenger in hand at 0820 and the eight-inch line five minutes later. *Ponchatoula* already had payed out 60 fathoms of towing wire and when the wire reached the *Venus* hawse pipe, 145 fathoms of wire had been unreeled and passed through the stern chock.

The stern of the tanker was a busy place as the wire started its trip across to *Venus*. Owing to the limited space available it was impossible to fake down the wire on the stern. Consequently the wire was fed off the reel on the 02 level, down a ladder on the starboard side, fairled around the capstan and then out through the stern chock. At the bottom of the ladder the plow steel towing wire, weighing more than eight pounds per foot, made its turn through a shackle on the end of an eight-inch manila lizard which was tied down to nearby bits.

Without a controlling device, in this case ring stoppers, the heavy wire would soon be out of control



bitter end left the reel. The eight-inch lizard was then placed around the capstan (several turns) and assisted by an eight-inch retrieving line, eased the wire into position so that it could be shackled to the chafing chain attached to the towing pad. The two lines were then used to ease the tow rig into position and left in place to assist recovery.

More than an hour was lost while the *Venus* crew tried to maneuver the heavy wire through her hawse pipe already filled with the anchor chain. A visual message suggesting that they attach the wire to the anchor chain outboard of the hawse pipe brought back this message emphasizing the language problem. "ANCHOR IS NOT NO LONGER CONNECTED COS YOUR BIG MESSENGER LINE SOME STRANDS BROKEN X BEING REINFORCED TO GO THROUGH HAWSE PIPE SHACKLE TO BITTER END OF CHAIN."

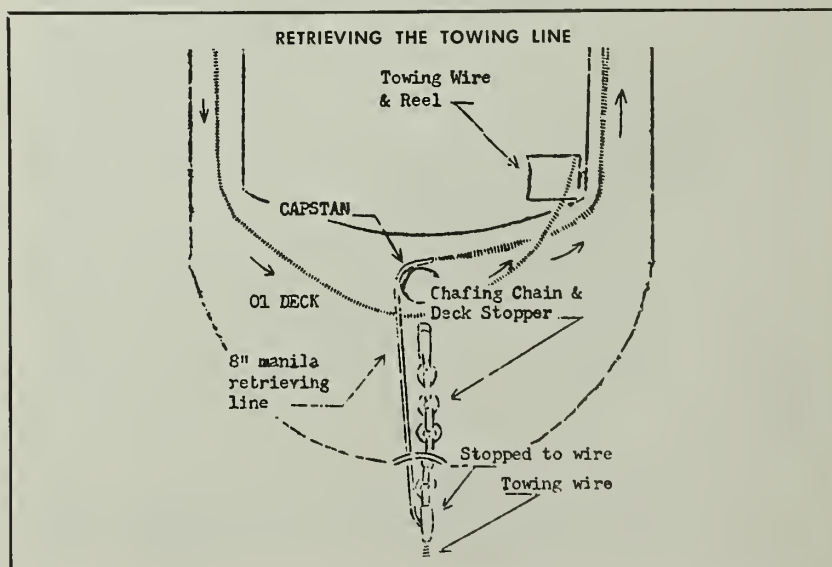
At 0945 the connection had been made and 55 fathoms of anchor chain had been veered out, later to be increased to 80 fathoms. *Ponchatoula* had drifted across the bow of *Venus* and was heading about west when speed was gradually increased in small increments until the oiler was making 47 turns. This slow increase in speed was used to bring *Venus* around onto the same heading as the tanker without throwing too much strain on the tow wire. Much of this strain was absorbed by the catenary (dip in the tow line) and chain which served as a spring, taking up sudden jerks in the towline because of wind and sea action.

and rush out through the stern chock like a bolt of lightning. In fabricating these "ring stoppers" the *Ponchatoula's* crew attached two wire pendants to padeyes on either side of the capstan with 10-inch rings spliced into the end of each. Two lengths of chain (5/16 inch stock) were shackled to padeyes on the portside. Each made a round turn about the towing cable, continued to a two-fold tackle where it was secured to the shackle with two round turns and then returned to the wire for another round turn before being returned to the portside padeye. Both wires pass through and over the rings in the end of the pendants. (See figure above.)

By hauling in on the tackle the light chain would tighten around the wire binding the cable in the ring. The weight of the wire would be passed to the two pendants and the movement of the cable stopped. During the passing of the wire a man was stationed at each ring

stopper with a five-pound maul to assist its passage.

The ring stoppers, which had been made up by the crew the night before, controlled the wire until the





TOW 'TARGET'—SS *Venus* presented an unforeseen problem when it turned out her crew understood little English.

At 1534 *Ponchatoula* and her train had settled down on a southwesterly heading after making the course change in five-degree increments. At 1724 the storm lying about 350 miles to the southwest was identified as *Typhoon Ivy*. The wind had been hauling to the southward and by late afternoon was blowing at 20 knots from the southeast.

This beam wind caused the steersman on the tanker to exercise every bit of his training to keep from parting the tow as he answered orders. The wind would cause *Venus* to sheer to port. When this happened the helm was put over and *Ponchatoula's* stern swung toward *Venus* to ease the strain, but it had to be met smartly or the stern would swing past and the strain would be repeated. Once the wire was straightened the tanker would then attempt to bring *Venus* back on course.

About 1900 *Ponchatoula* began changing course to the left in five-degree increments and settled down on 160°, a heading closer to the wind and designed to reduce the sheers to port being made by *Venus*. A little later the wind hauled around to the south-southwest before backing to southeast where it remained for the rest of the night, blowing at 25 to 29 knots.

The engineroom crew had their hands full working the throttles. After the initial hookup, power had to be applied with "kid gloves" to keep from parting the tow wire. On crosswind courses they had to

be constantly on their toes for orders to increase or reduce power as the tanker maneuvered to meet the erratic movements of *Venus*. Turns for a normal seven or eight knots gave an estimated speed of advance of about 3.5 knots when heading into the wind. On a downwind course, turns for nine knots produced an SOA of about seven knots.

The navigator and his quartermaster assistants were busy throughout the night plotting the positions of the two typhoons. *Harriet* was blowing northeast along the south coast of Honshu while *Ivy* was moving northwest about 300 miles away. Wind and sea conditions in the two storm areas and their forecasted movement were sent to the tanker by Fleet Weather Center Yokosuka every three hours.

About noon, *Ponchatoula* made the slow and exacting turn to the southwest to meet the wind which had shifted to that direction, but almost as soon as the maneuver had been completed a message was received ordering *Ponchatoula* to rendezvous with *USS Reclaimer* (ARS 42) which would take over the tow. *Ponchatoula* was brought around 180° and headed back up her wake toward the approaching ATF.

The next afternoon the special sea detail was set and preparations were made for dropping the tow. The enginemen slowly backed off the throttles until *Venus* fell once again into the trough of the sea and *Ponchatoula* ended at right angles

to her, stern to bow.

On *Venus* the wildcat strained as she retrieved her anchor chain, bent on the tanker's eight-inch manila messenger for return, and disconnected the wire. The lizard and retrieving line were used to drag the chafing chain back on the tanker deck so that the wire could be disconnected before being heaved around on the capstan and fed along the 01 level forward on the starboard side.

The wire was then led across the deck in front of the bridge and then aft along the portside and then back up the ladder to the reel.

Dropping the tow was an exacting business and had to be executed smartly so that the tanker's propellers would not become fouled in the wire and so that no collision would occur. In a space of 62 minutes, the engineroom answered 31 different engine orders as the tanker was gradually brought to a halt and the stern held in position for retrieving the tow.

After the tow was dropped and the wire and all equipment safely secured, *Ponchatoula* resumed her interrupted voyage.

As she left the scene, the master of *Venus* sent the following message, "MYSELF OFFICERS AND CREW ALL FILIPINOS OF STEAMSHIP VENUS ANTICIPATE OUR SINCEREST THANK YOU ALL FOR SAVING US X WE WILL NOT FORGET THIS HEROIC EVENT STOP IF OUR COOPERATION IN MANEUVERS HAD SHORTCOMINGS PLEASE PARDON BON VOYAGE. HOPE WE MEET AGAIN."



PEOPLE TO PEOPLE — US sailor enjoys tea time with British destroyerman. Rt. Talking shop in Cheviot's boiler room.

A Day on a British Destroyer

THE UNCLASSIFIED MESSAGE from HMS *Cheviot* (D 90) to the Commander Seventh Fleet read: "AM SLIPPING 17001 X WILL JOIN YOU"

This meant that Her Majesty's Ship *Cheviot*, a 2545-ton destroyer, was getting underway to join USS *Helena* (CA 75), flagship of Com-Seventh Fleet for a few days' operations.

Early in the morning, during a refueling operation between *Helena*, USS *Navasota* (AO 106) and *Cheviot*, the highline was rigged for the exchange of personnel between the British destroyer and the flagship.

It was nine for nine. Four officers and five petty officers first class from *Helena* and Flag Allowance made the trip to *Cheviot*, and this is what they had to report about life in Her Majesty's Royal Navy:

Once on board, the officers went up forward to the wardroom and the petty officers were assigned to the Chief's Mess forward, the Petty Officer's Mess amidships, and the After Chief's Mess.

On board *Cheviot* we found nothing but friendliness everywhere we went. Everyone from the Commanding Officer, CAPT C. W. Malins, RN, to the lowest ranking junior seaman, was ready to show us about and make us feel right at home. This

they did, without too much trouble.

What's it like living on board a British destroyer? What's it like serving in the Royal Navy? Different, could be the easiest way to describe it; different, but interesting and exciting.

After talking with members of the crew, we learned that in the Royal Navy, you can enlist at the age of 15 but "reckonable service" does not begin until you reach the age of 18. At the present time a man can sign on for periods of 9, 14 and 22 years.

There are four categories of seamen: junior seaman, ordinary seaman, able seaman and leading seaman. Then, there's the petty officer and chief petty officer. The fireman ratings are called "engineering mechanics." The Chief Yeoman is actually a signalman, and not a yeoman. It's the ship's writer who handles all of the official correspondence.

In the officers' ranks, a midshipman is equal to our ensign and a sub-lieutenant (pronounced sub-lefenant) is the same as our junior grade lieutenant.

At 1100 hours all messmen in the ship began drawing the daily ration of rum for their respective messes. Every man on board, who is over the age of 20, is entitled to a tot of rum; or $\frac{1}{8}$ of a pint a day.

If a man doesn't want his daily ration, he claims "temperance" and is credited with threepence (equivalent to about four cents American).

Up forward in the seaman's mess, the rum is poured into a huge wooden tub. Two parts water, mixed with one part rum. On the tub is inscribed: "The Queen, God Bless Her." The petty officers and chiefs are served neat, un-cut rum.

Lunch is then served. Each messman draws the food from the galley amidships and brings it below to the messes for distribution. They don't have a mess hall (although many Royal Navy ships do use the mess hall system).

Reveille on board *Cheviot* goes about 0630, and breakfast is up (chow is down) between the hours of 0700 and 0800. At present *Cheviot* is on tropical routine, and the ship's company works from 0700 until about 1300 and normally they pack up (or scure).

At about 1600, it's "tea time" on board. This includes tea, bread and jam, and sometimes lunch meat.

The ship's canteen opens about 1730 and, among other things, each man can purchase two cans of beer. All purchases are made on board in Hong Kong dollars.

The canteen proved to be a very interesting spot, primarily because it is run by a civilian who works

for NAAFI (the Navy, Army and Air Force Institutes).

NAAFI was incorporated in 1920 and is the official organization for HM forces in peace and war. It isn't a government department; it's not state-owned nor is it privately owned.

Primary mission of NAAFI is to provide a canteen for HM forces wherever they are stationed. It also provides groceries for the families back home.

At present, NAAFI conducts about 1300 canteens at home and overseas, about 30 clubs, more than 500 ships and messing stores, 25 sports shops, 300 mobile canteens and seven holiday centers.

We visited the canteen and found it to be stocked with various canned foods, including pears, spaghetti, soups, strawberries, heavy cream and numerous other items. It also has ice cream pies, books and newspapers from home and model plane sets.

At about 2230 we sacked out in the after chief's mess on what they call "camp-beds." It looks like a cut-down version of the Army cot and, although built close to the ground, it is built for comfort. It also can be slung as a hammock.

This was the end of a day that brought us in close contact with the ship's company and the routine of the ship. Originally, we were scheduled to return to *Helena* that night, but because of emergency repairs, the commanding officer found it necessary to put into Sasebo, Japan, and we went with them.

One of the things we found interesting on board *Cheviot* was the employment of Chinese civilians to take care of the laundry, tailoring and shoe mending. Also on board are official Chinese who hold ratings in the Royal Navy.

Cheviot was named after a range of hills that separates England from Scotland. The hills make fine grazing for sheep. And so explains the ship's insignia: a sheep's head beneath a crown with the hills in the background. On board this ship the executive officer is a two-and-a-half ringer, but he's called the first lieutenant. The Chief Master-at-Arms is called the Coxswain and is usually the senior Chief Boatswain on board.

A tour of duty in the Far East for members of the Royal Navy is 18 months. That's for all hands, including the civilian canteen manager.



STUFFED HEAD of sheep in wardroom is part of ship's insignia. Sheep are from hills *Cheviot* is named after.

The crew is flown over from England and, when the 18 months expire, all hands will be flown back to England.

On board *Cheviot* the peacetime working rig (uniform of the day) is "10As negative"—blue shorts and sandals, without tops. The "10s" peacetime working rig is white shorts, stockings and tops. The "10s negative" is without tops.

During action, the working rig is long-sleeved shirts and long trousers. At present all of the ship's engineer-

ing mechanics wear a coverall type of uniform to protect the body.

The ship has a radio show sometimes, featuring news and music. But one of the big favorites on board is Armed Forces Radio Service, Far East Network.

During one of our meals we were fortunate enough to listen to an American baseball game. This brought up many questions from the Chiefs on American baseball, which we were most happy to answer. In return, they answered our questions on cricket and Rugby.

One of the most popular sports on board is water polo. They also have a cricket team. The competition is keen among Her Majesty's ships in the Far East. One of the most popular American sports on board is basketball.

All hands on board *Cheviot* are instructed to read the "Daily Orders," which is the same as our "Plan of the Day."

Meanwhile, back on board *Helena*, *Cheviot's* officers and men were given the same royal treatment. They enjoyed the meals in the wardroom, chief's mess and crew's mess; had ice cream milkshakes at the soda fountain; and watched the movies topside. They observed *Helena's* crew in action at a firing exercise.

Best way to describe the exchange of personnel between the two ships: Everyone had a jolly good time.

—J. A. Celentano, JO1, USN

A BRITISH DESTROYER makes way through rough seas in the Pacific. US men from *USS Helena* had a 'jolly good time' during a day on similar DD.





LIBERTY PARTY views memorial to WW I dead. Below: Two Roosevelt men take buggy-ride through Genoa



NEARBY fishing village of Portofino was found to be a photographer's delight.

Ancient Mariners Had Liberty Here

GENOA, home of many ancient mariners and a popular sea port since the Middle Ages, was a natural stopping place for the 60,000-ton aircraft carrier *uss Franklin D. Roosevelt* (CVA 42) during a Mediterranean cruise.

The visit came after a tour of duty with the Sixth Fleet in the Eastern Med.

When the carriermen first saw the city in white relief against the rising slopes of the Apennines, they began to realize why the Italians nicknamed this city "La Superba," meaning "The Proud." After the nine-day visit that took liberty parties through steep streets with many medieval churches, marble palaces and other symbols of Genoa's historic past,

there was little doubt in the minds of the Navymen as to the city's right to her title.

Although this city is studded with historic points of interest, including the place where Columbus spent his younger days, the carriermen found no sleeping beauty. Today Genoa is a chief port and gateway to the northern plains, the heart of Italy's agriculture. Tunnels through the mountains connect the city to Switzerland, making her a port for both Switzerland and Germany.

All this, plus side trips to nearby picturesque fishing villages, kept the Navymen of *uss Franklin D. Roosevelt* busy. From what the crew saw of this old and beautiful port they agreed that the liberty was great.





RUSSIAN greets Navyman. Rt: U. S. flag is made ready to fly from *Panfilov*.

USSR Ships Make Port in a Storm

TWO RUSSIAN MERCHANT SHIPS found safety in the harbor of the U. S. Naval Base, Midway Island, after one of the pair had suffered severe damage in a storm 700 miles northwest of the Pacific island.

ss *General Panfilov* was escorted to safety by ss *Odessa* and the Navy Department answered their appeal by granting permission for the ships to enter the harbor.

The two ships, both former U. S. liberty ships, had left Vancouver, B. C., en route to Vladivostok, Russia, with cargoes of grain when they encountered the North Pacific heavy weather.

Hatch covers on *Panfilov* were smashed, letting water into the number one hold. All four lifeboats were carried away, the face of the port wing flying bridge dished in and her main deck cracked in two places just forward of the superstructure. These cracks athwartships caused Mikhail Serich, Master of *Panfilov*, to seek shelter lest his ship break up.

According to Serich, the storm that caused this damage had winds of hurricane force and the sea was running so heavy that his ship took green water down her stack.

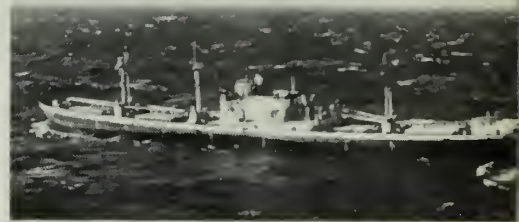
Panfilov was met off Midway by a harbor tug bearing a 13-man inspection party. A Navy CPO harbor pilot guided *Panfilov* to a berth.

Upon entering the calm waters of Midway's lagoon, Serich grinned broadly and exclaimed, "Is good. Is good." Then waving his arm to the

northward, and indicating what his ship had recently been through, he added, "Too much rough water already."

A Navy medical officer examined *Panfilov's* chief officer, who had been smashed against a winch by seas while supervising emergency repairs during the storm's height. He was found to have a cracked rib and a leg injury, was treated and returned to his ship where the vessel's doctor cared for him.

The doctor on *Panfilov* had already cared for numerous cuts,



Russian freighter SS *Panfilov*

sprains and contusions incurred by crew members during the storm. None of the three female members of the crew, a cleaner and two stewardesses, was injured.

It took two days to complete the repair work, and then the two ships resumed their voyage.

IN PORT — Midway-based sailors handle lines as Russian ship comes in for aid.





This Is the Life in

ALTHOUGH THE UNIFORM and accent may seem strange, a sailor from the U. S. Navy would discover that life and training for the Australian navyman from "down under" are very similar to his own. He would find the enlisted man's club called a canteen and his friends playing cricket instead of baseball during their leisure hours, but underneath, the daily routine would seem familiar.

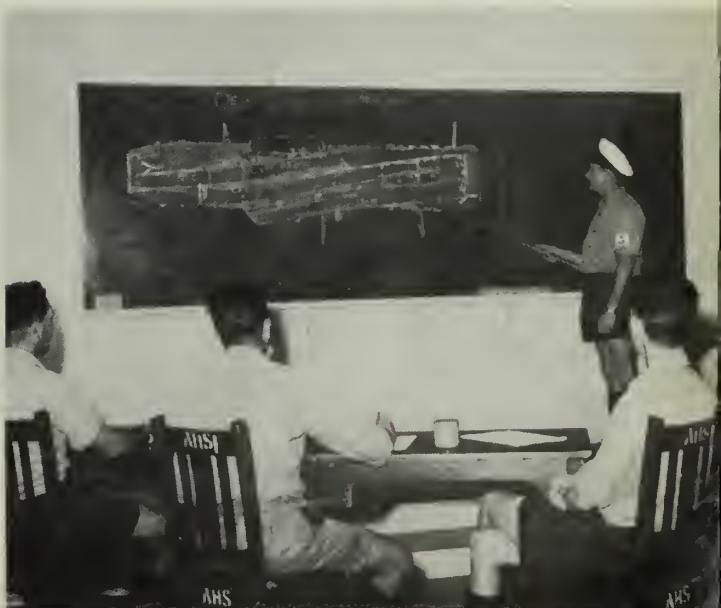
Here's a group of photographs showing a sample of navy life from three Australian naval establishments. They are: Flinders Naval Depot in Victoria where nearly every Royal Australian Navyman does his early training; the Royal Australian Air Station at Nowra, and the Naval Apprentice Training Establishment at Schofields, which is located just outside Sydney.





the Australian Navy

Clockwise from top left: (1) Flinders Naval Depot Guard of Honour is inspected by the First Sea Lord, Admiral of the Fleet Earl Mountbatten of Burma. (2) Royal Australian Navy cooks learn to make bread at Flinders. (3) Navymen receive early lesson in seamanship at the Australian Naval Depot. (4) Cricket, national summer game down under is as popular with Australian navymen as baseball is in the U. S. Navy. (5) Ship's company canteen at NAS Nowra. (6) Airmen receive instructions in handling aircraft at Nowra. (7) Australian naval airman relaxes in his living quarters. (8) Naval Artificer Apprentice learns how to use lathe at Schofields' training center. (9) Track is another sport that is enjoyed by Australian navymen. (10) Trainees at H.M. Naval Dockyard, Garden Island, Sydney.

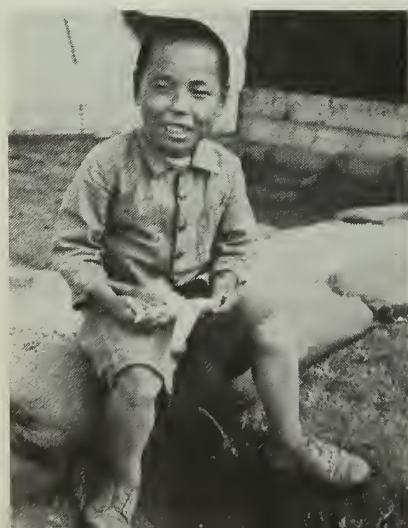




MI AE ORPHANAGE, founded by Korean mother, is maintained by 14 Navymen stationed at Pusan office of MSTs.



KOREAN orphans receive clothing and food at their home. Below: Young boy's smile expresses his thanks.



Sailors Adopt Mi Ae

OUT IN PUSAN, KOREA, there's a little place called the Mi Ae Orphanage. It's maintained by 14 Navymen in the Pusan office of MSTs and run by its founder, Mrs. Lee Kyung Soon.

Mrs. Lee, a small bespectacled Korean, started the orphanage during the Korean conflict after she had lost two of her own children, ages seven and nine, while evacuating North Korea.

She opened the orphanage 15 Sep 1951, using tents for living quarters for the first 15 children she found wandering the streets. She now has 79.

While picking up dunnage and scrap material to maintain the orphanage, she was befriended by Army personnel who began to contribute to the home. In May 1957, LCDR Paul R. Sutherland, USNR, commanding officer of the MSTs Pusan office, joined hands with the Army to assist. A month later the entire unit took over the main support and held ceremonies at the Enlisted Men's Port Club. From then on, the operation was underway to improve living conditions of the children and the appearance of the grounds.

The first project was to move the orphanage's pig pen from among the living quarters and mess hall to a new location, improving sanitation. Screening was obtained and the windows and doors of the living quarters

were covered. Next was painting the outside to help weatherize and color the place up a bit. The paint supply was limited, so the plan for inside painting was confined to the floors. But, since sailors seem to have a certain knack for things like this, enough paint "turned up" to do the walls.

It seems as though the juvenile problem is also present in Pusan, so the Navymen constructed fences to discourage "slick boys,"—the name given to night gangs of petty thieves.

The attack cargo ship *uss Tulare* (AKA 112) came into the picture by contributing \$70 during a visit to the port. This made a new tile roof possible and it was put on the boys' living quarters to replace the old leaky one and to combat the cold of the rugged coastal weather. The next project in mind calls for installing electricity to replace oil lamps now used.

Since it takes money to keep an orphanage going, men of the Pusan MSTs office have taken it on themselves to contribute a small amount each month out of their pay. They also write home and ask their families to send them any spare clothing.

Mrs. Lee gave the name of Mi Ae to the orphanage. Mi is Korean for "beauty" (for help received in Korea from the beautiful country called United States of America). Ae is Korean for "love".



U.S. CHIEF helps train ROK officers. Right: Diesel engine class held at Korean Naval Academy located at Chinhae.

Tong-Hae at Chinhae

TO MOST NAVYMEN the Korean phrase "Tong-Hae" might not mean anything. But, its English equivalent—"Control of the Sea"—is familiar to seamen all over the world.

To help maintain Tong-Hae, Korea is training top-notch naval officers, at the Korean equivalent of Annapolis.

This training facility is the Korean Naval Academy at Chinhae, where a U. S. Naval Advisory Group is helping the Korean Navy to develop its future officers in a school patterned after the one we have at Annapolis.

The Chinhae school now features a four-year course of more than 4000 hours of instruction. Subjects range from navigation to English and from the history of seapower to physical training. The emphasis is on scientific engineering, which takes up 56 per cent of the midshipman's time during his four years of study.

Under this category are courses in thermodynamics, fluid mechanics and marine engineering.

Practical education is gained from summer cruises, which a midshipman takes during his last two years, in ships operated by the ROK Navy.

Except for the role of the U. S. advisory group, which is to make recommendations whenever needed and to plan and procure training aids and equipment, the academy is operated entirely by the Koreans.

The school at Chinhae has been in operation since 5 May 1949 by official government proclamation, but its history goes back to 1945 when the Korean Marine Defense Corps was organized.

Korean naval lore is much older than that. Way back in the 14th century Admiral Lee Soon Shin led an improvised Korean navy, featuring an "ironside" Turtle Ship, into combat against an enemy fleet.



THE WORD — Midshipman practices English. Below: ROK officer gets word.

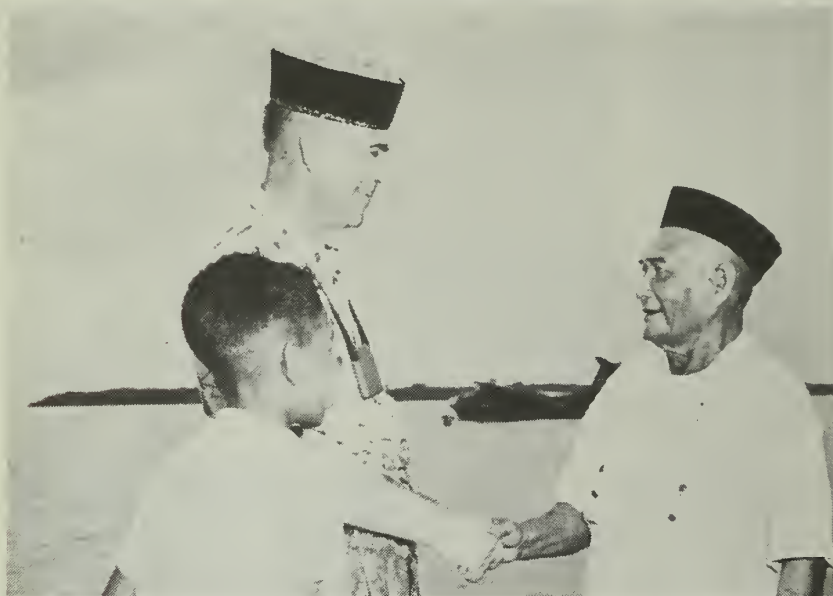
ALL ABOARD — ROK midshipmen greeted visiting US ship during training.



MAY 1958



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



BLOOD BROTHERS—WO H.P. Garrett, USN, was given high Moslem rank of Datu Mahabassar while visiting Philippine friend he had not seen since '40.

School of Water Safety

NAAS Whiting Field, at Milton, Fla., situated in an area where swimming, boating, fishing and other water sports are almost everyday routine, has opened a special "night school" that's really becoming popular in that northwest Florida region.

An outgrowth of a meeting between Santa Rosa County officials and Whiting Field officers, the school is conducting the area's first water safety program. Attendance figures indicate there's long been a need for such a school.

Open to anyone who is interested, this "School of Water Safety" charges no tuition. It was originally set up to consist of eight night classes,

covering every phase of boating and water safety. The lectures offer local civilians, and Navymen too, a chance to bone up on such subjects as small boat handling, rules of the road, coastal navigation and piloting, running and landing procedures, boat trim and performance and practical small-boat navigation.

The Navy provides training personnel and facilities for the classes, which are held each Thursday night in the Radar Building auditorium at the field. Guest speakers and training aids add appeal to the sessions.

The program now has three enthusiastic sponsors—the Navy, the county officials who helped launch the school and the Sportsmen Club.

YESTERDAY'S NAVY



On 4 May 1942 the Battle of the Coral Sea began with an air strike on Tulagi by U. S. carrier-based aircraft. On 7 May 1945 Germany surrendered unconditionally to end the European phase of World War II. On 10 May 1862 Pensacola, Fla., was evacuated by Confederate forces. On 11 May 1943 Army troops were landed by the Navy on Attu in the Aleutian Islands. On 26 May 1850 an expedition under LT E. J. deHaven set out for the Arctic to explore, and seek traces of Sir John Franklin, whose ill-fated British party had disappeared in 1847-48.

WO Becomes Datu Mahabassar

A Navy warrant officer has been granted the title of Datu Mahabassar by his "blood brother"—a Moslem leader whom he had not seen for more than 17 years—when he made a return visit to the Sulu Archipelago in the Philippine Islands.

The high Moslem rank, only two grades below the rank of Sultan, conferred upon Aviation Electronics Technician Horace P. Garrett, usn, came as a complete surprise, since it is rarely bestowed outside that faith.

He first met the Panglima Sarawi in 1940 when he was a radioman third class serving with a seaplane squadron operating out of the Sulu Archipelago. During that tour of duty he became a close friend of the Moslems who inhabit the area. The Panglima Sarawi adopted him as a "blood brother," an honor which carries with it enduring bonds of friendship.

Last summer Warrant Officer Garrett returned to the Philippines for duty with another seaplane squadron — PatRon 42 — based at Sangley Point. But Sulu is a long distance from Sangley, so Garrett communicated with his "blood brother" now aged 73, through newly acquired "relatives." As a "blood brother" of the Panglima Sarawi, the Panglima's kin automatically become Garrett's kin as well. They include aged descendants of the Moslem leader as well as a number of grandchildren ranging from 1 to 16 years of age.

After a 17-year absence, a reunion between the two was finally arranged. One of VP-42's P5Ms flew Mr. Garrett to the island of Bungao, which is virtually the southernmost point in the Philippines, lying close to Borneo. Almost all of the 700 residents of the tiny village of Malassa turned out to meet him.

The reunion was climaxed by a ceremony at the Moslem leader's home where the U. S. naval officer was feted by more than 100 of the Panglima's followers. The ceremony included prayers from the Koran, the burning of incense, the drinking of pure rain water, and outfitting

Garrett in colorful ceremonial robes made especially for him. He was presented the most prized possession of his "blood brother"—a 2½-foot, pearl-handled kris [dagger] which the Panglima had inherited from his father.

In return, Warrant Officer Garrett presented his "blood brother" scale models of the aircraft carrier *uss Franklin D. Roosevelt* and the battleship *uss New Jersey*.

Since becoming a Datu, Garrett has returned to the states and is assigned to NAS North Island, San Diego. It may be many years before he will have a chance to see his Moslem friends again; however, his title and position among them will pass on to his own descendants through seven generations.

Lost and Found

People-to-people really pays off, James H. Price, EN1, USN, found out at Yokosuka, Japan.

A crew member of *uss Catfish* (SS 339), Price lost his wallet, containing more than 45 dollars and all of his identification papers, somewhere on the Naval Base at Yokosuka. But, thanks to Yuzo Tsuruta, of Yokohama, the wallet was returned to the Navyman almost before he knew he had lost it.

Tsuruta, an employee of the Public Works Maintenance Division at Yokosuka, found the billfold near the Fleet Gymnasium and promptly turned it over to his foreman. The foreman notified Rex W. Hovey, CWO, CEC, USN, the Assistant Maintenance Officer at Public Works, and within one hour Price had his wallet back again.

For Tsuruta, who received a reward of 1800 yen, people-to-people paid off too.

Japanese Midshipmen Visit CVA

The aircraft carrier *uss Hornet* (CVS 12) played host to approximately 100 Japanese midshipmen from the Japanese Naval Academy in Tokyo recently.

The group of future naval officers boarded the ship moored under the giant crane at Yokosuka Naval Yard.

After a wardroom briefing, U. S. naval officers took the middies in groups of five or 10 to "see the sights" aboard the carrier. On the flight deck they viewed some of the latest types of jet aircraft and received detailed descriptions concerning in-flight refueling equipment,



WELCOME ABOARD—Japanese midshipmen make their way up officers' brow of *USS Hornet* (CVA 12) to tour Pacific Fleet carrier and spend a day aboard.

dive brakes and other gear.

After lunch the groups went below to visit the engine rooms and boiler compartments.

The Japanese midshipmen left

the carrier in the late afternoon expressing amazement over the equipment they had seen and the fellowship that existed between the men of the two navies.

Little Agnes Is Gone But Not Forgotten

It was a Black Friday for Navy Frogmen at the amphibious base in Coronado, Calif., when they came and took Little Agnes away.

Things won't be quite the same on the beach anymore, with Little Aggie gone. The little seal took sick with the Occidental flu and the boys of Underwater Demolition Unit One had to let her go.

Until she became ill, Agnes had been the mascot of the Coronado-

based frogmen of the Pacific Fleet Amphibious Force, enlivening things along the strand with her light-hearted honking and incessant skylarking. Agnes could be counted on to brighten a dull moment by romping in the surf with her "boys." But, there won't be anymore of this, for little Aggie's been transferred for good.

The tiny seal had been given to UDU-1 by the men of Beachmaster Unit One, who found her on the beach near Camp Pendleton during an amphibious operation.

When Agnes took sick the worried frogmen called the San Diego Zoo. Their worst fears were confirmed when experts there told them Agnes was in danger unless she received immediate medical care.

The frogmen also learned that the zoo needed a baby seal for its "Children's Zoo," so they gave up Agnes to make sure she could go on getting the proper care after her bout with the flu.

"If the kids at the zoo have as much fun with Aggie as we did," says Robert E. Inman, SK3, Little Aggie's keeper during her brief tour with the frogmen, "then they're really going to have a ball."



BYE, BYE AGNES — T. H. Devine, BM3, of UDT holds mascot. The seal caught flu and was sent to zoo.



SHIP-TO-SHIP — Canadian sailors visit USS Wahoo (SS 565). Rt: U.S. Navymen enjoy visit to Canadian ship.

From Two American Navies

Usually, you can expect plenty of military formality when the navies of two friendly nations pay courtesy calls on each other in port, but when five sleek Canadian destroyer escorts moored at Yokosuka, Japan, neither U. S. Navymen there, nor the Canadians, relied on official visits alone to demonstrate their friendliness.

During informal, off-duty get-togethers, Canadian sailors were "welcomed as shipmates" on board USS Wahoo (SS 565), Hornet (CVS 12) and other U. S. ships at Yokosuka. Meanwhile, U. S. Navymen were enjoying similar displays of hospitality from the five DDEs which make up the Canadian 2nd Escort Squadron. Since most of the visits were made around lunch time, the

sailors of both nations were quick to notice the difference between the traditional drinks of the two navies—rum for the Canadians and rich, black coffee for the U. S. Navymen.

The U. S. Navymen were also very favorably impressed with the streamlined beauty of the Canadian ships—HMCS Skeena, Fraser, Margaree, Cayuga and Crescent. The first three have all been in commission for less than three years, and they've attracted much attention in naval circles all over the world.

Roanoke Is Ready

There's a cruiser in the Pacific Fleet whose crew members are justifiably proud of their motto, "Nunc Parati Sumus." Translated, this means, "We Are Ready Now." The

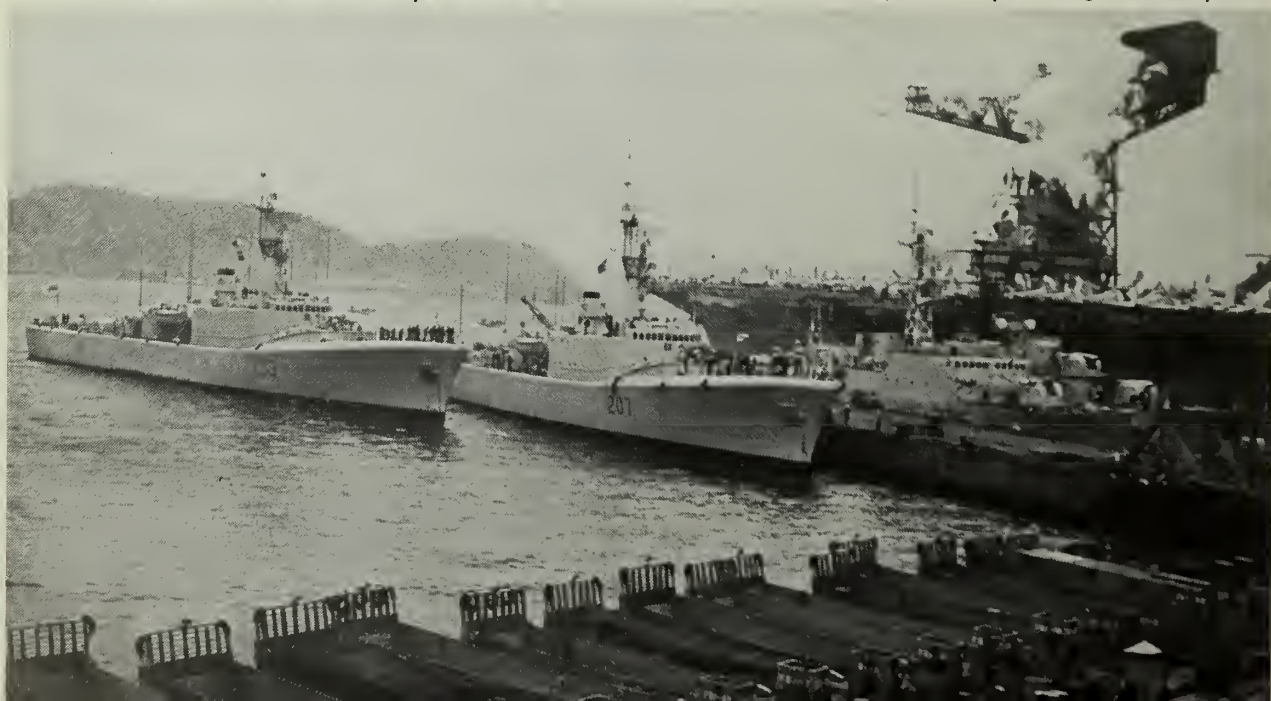
name of this cruiser is USS Roanoke (CL 145).

In 1955, when she left the Atlantic Fleet, Roanoke was awarded the Battle Efficiency Award for cruisers by Commander Battleship-Cruiser Force, Atlantic. Then she moved into the Pacific—and took up where she left off.

She placed second in the Battle Efficiency Competition for fiscal year 1956, winning numerous gunnery awards. For fiscal year 1957 she had to settle for a tie with USS Toledo (CA 133) for the over-all Battle Efficiency Award.

But Roanoke went on. She was awarded the Red "E" for Engineering Efficiency and the Green "E" for Operations Efficiency. In addition, she is entitled to wear "E's" on every turret and antiaircraft gun mount

AMONG FRIENDS—Canadian destroyer escorts rest in Yokosuka harbor among U.S. ships during three day visit.



and AA director, and on two of her four six-inch gun directors. The "E" on the Main Battery Director for efficiency in the Long Range Practice has been won for four consecutive years. Turret #5 sports a Gold "E" with a hash mark denoting six consecutive years that it has qualified for the "E" award.

Roanoke was commissioned in 1949. Since that time she has gathered a total of 37 "E's." And if the number of "E's" are any indication, the crew of *Roanoke* can rightly say, "Nunc Parati Sumus."

Mercy Flight

A Navy enlisted pilot flying a helicopter attached to the Argentinia, Newfoundland, Naval Station, braved fog and bad weather to fly a seriously ill 22-month old boy to the station's hospital after the child had consumed an overdose of pills prescribed for his mother.

Chief Aviation Machinist's Mate Lawrence W. Brooks, USN, flew the HO4S helicopter to the Newfoundland settlement of Bay L'Argent to pick up the child. Two hours later the boy was undergoing treatment at the naval station's hospital.

Receiving the request for assistance at 1205, Chief Brooks had the station's helicopter in the air at 1230 bound for Bay L'Argent. The helicopter was guided by a U. S. Coast Guard PB1-G patrol bomber.

Accompanying Chief Brooks was F. H. Spratlin, AD1, USN, and a doctor, LT Michael C. Carver, MC, USN. The pilot, crewman, and Navy doctor returned to the naval station with the child and family doctor at 1440. The patient was rushed from helicopter into the hospital where immediate treatment was given.

Midway Joins AEW System

Tiny Midway atoll, where an epic naval battle turned the tide of the Pacific War in 1942, is getting a \$40 million face-lifting to bring it into America's early warning system.

Midway's coral islands were virtually abandoned after 1945. By 1950, its wartime garrison of 10,000 men was gone; a small caretaker force stayed on to man a refueling station. But today the Navy is back, building a giant airfield on the 948-acre Sand Island for its Airborne Early Warning Defense Wing, Pacific. From this base, radar-equipped *Super Constellations* will patrol the skies between Midway

and the Aleutians, on watch for hostile bombers.

The planes and a chain of radar picket destroyers will form Barrier Pacific. This will be the easternmost extension of the DEW (Distant Early Warning) Line of radar stations across America's far north.

Construction began in July 1956, and is more than half-way completed. Work on the core of the project, a 7900-foot runway and a control tower, has been completed. Two dredges are chewing at the bottom of the harbor, deepening it from 24 to 37 feet for the super tankers that will bring fuel to the base.

Early this year, the new airfield will have one of the largest hangars in the world. And by mid-1958, housing, a school and two immense water reservoirs with a total capacity of 13 million gallons will be ready for a new Navy community of 2800 on this vital Pacific outpost.

Night Shift

What is believed to have been the first night transfer of personnel by helicopter between a carrier and destroyer underway at sea occurred early this year in the South China Sea when a chopper from *uss Philippine Sea* (CVS 47) carried a flight surgeon to the destroyer escort *uss Renshaw* (DDE 499) to treat two injured pilots, and later transferred the pilots back to the carrier.

The dramatic transfer was neces-



DEEP SEA FISHING—*USS Los Angeles* (CA 135) seems ready to hook *USS Ticonderoga* (CVA 14) with crane.

sary after an S2F *Tracker* skidded over the side of the carrier while making a night takeoff. *Renshaw*, acting as plane guard, rescued the two pilots. LT Richard Scajeda, MC, USN, was then transferred to the destroyer to treat the injured pilots.

A short time later the pilots were brought back to the carrier by the helicopter. At any other time this would have been a normal flight, but at night it was an extremely hazardous operation, for the copter had to hover without visual reference to the horizon or a fixed object on the surface of the dark ocean.



PETROL PUMPER—While cruising along choppy Atlantic *USS Caloosahatchee* (AO 98) refuels ships on both sides. The Fleet oiler operates out of Newport.



All-Navy Basketball

The ComServPac "Packers" and the San Diego NTC Waves are the 1958 All-Navy Basketball Champions.

The ServPac hoopsters won the 1958 crown by downing the DesLant "Destroyers" 76-73 in the final round of the double elimination tournament held at Pearl Harbor 13-18 March.



BASKETBALL CHAMPS—ComServPac 'Packers' beat tough competition for All-Navy crown. *Right:* San Diego NTC Waves successfully defended their title.

Seeking revenge after an earlier defeat at the hands of ServPac, the Destroyers threw the All-Navy cage tourney into an extra day of play by downing the Packers 73-60 in the fifth round of action.

Then, in the final game, DesLant took the Packers in tow after six minutes of play and remained out in front until the clock showed only 45 seconds left in the game. At that crucial moment, ServPac found the target, and with only 40 seconds remaining, they tied it at 71-all.

At that point the Destroyers put on a freeze and were playing for

the big last shot but an on-rushing destroyer had a foul called against him for charging. DesLant's captain protested so violently to this, that the officials charged him with a technical foul.

The Packers took advantage of the free throws by going out in front 74-71, and then quickly racked up another two points to spare. Although the Destroyers were able to sink another field goal before the final gun, they were unable to close the gap—thus losing the 1958 All-Navy Championship to the ServPac Packers.

DesLant's only other defeat was also at the hands of ServPac. They lost that one during their initial meeting during the third round of the All-Navy playoffs. That game—perhaps the most exciting of the nine-game series—see-sawed back and forth as first one team, and then the other exchanged the lead. The Packers held a one-point lead with only seconds remaining when the Destroyers gained control of the ball. When the gun ending the game sounded, the ball was in the air. As more than 4000 fans stood breathless, the ball hit the rim and bounded away—giving ServPac an 80-79 victory.

Here's a brief rundown of other action in the All-Navy finals:

- *First Round*—ServPac downed ComTwelve 91-73; Deslant defeated NAS Lakehurst 96-70; while NAS Pensacola drew a bye.

Meet the Navy's Top Boxers

Here are the new All-Navy Boxing Champs.

The All-Navy Boxing Finals, conducted at the U. S. Naval Station, Norfolk, Va., were not completed in time for a detailed blow-by-blow report to be made before this issue went to press.

112-POUND CLASS

Thorban Brady, MMFN, USN, (USS *Damato*, DDE-871)

119-POUND CLASS

James A. Driver, HSSA, USN, (NTC Great Lakes, Ill.)

125-POUND CLASS

*Francis (Tabby) Lee, SN, USN, (USS *Cascade*, AD-16)

132-POUND CLASS

John Dixon, SN, USN, (ComSix)

139-POUND CLASS

William Martin, AE3, USN, (NAS Jacksonville, Fla.)

147-POUND CLASS

Ernest G. Curtis, TN, USN, (USS *Damato*, DDE-871)

156-POUND CLASS

**William C. Branch, SN, USN, (USS *Yellowstone*, AD-27)

165-POUND CLASS

Lawrence Howard, AN, USN, (NAS Cecil Field, Jacksonville, Fla.)

178-POUND CLASS

Solomon Johnston, SH3, USN, (Com14)

HEAVYWEIGHT CLASS

***Roy Louson, BMSN, USN, (USS *Sierra*, AD-18)

*Retained his 1957 All-Navy 125-pound crown

**Winner of the 1957 All-Navy 147-pound championship

***Also a former All-Navy champion

- *Second Round*—ComTwelve 94, Lakehurst 87 (Lakehurst eliminated); DesLant 95, Pensacola 65.

- *Third Round*—Pensacola 80, ComTwelve 76 (Com12 eliminated); ServPac 80, DesLant 79.

- *Fourth Round*—DesLant 108, Pensacola 69 (Pensacola eliminated).

- *Semi-finals*—DesLant 73, ServPac 60.

- *Finals*—ServPac 76, DesLant 73.

The San Diego Naval Training Center Waves successfully defended their Women's All-Navy Basketball title by scoring three decisive wins in the service-wide meet held at NTC San Diego, 13-16 March.

A 47-30 triumph over the North Atlantic area champs clinched the title for the San Diego cagers. It was their second straight win over the Washington, D. C., team which they trounced 40-30 in the meet's opening.

In the semi-finals, NTC San Diego crushed the Western Pacific's entry from Pearl Harbor 52-24.

The NTC Waves, after winning the 11th Naval District title with a 20-0 record (their 40th consecutive win in district play), went on to win the Pacific Coast Region finals and the right to represent that area in the All-Navy competition. Other regions taking part in the All-Navy Wave Basketball Championship play-offs included the North Atlantic Region (Washington, D. C. Wave team); the South Atlantic Region (NAS Jacksonville); and the Western Pacific Region (Pearl Harbor team).

Swapping Honors

While participating in underway training exercises off San Diego, 18 men and three officers of the radar picket destroyer *uss Lowe* (DER 325) became "Honorary Submariners." At the same time, a representative group from the radar picket submarine *uss Rock* (SSR 274) became "Honorary Destroyermen."

The swap in personnel came about when the two skippers thought that it was about time some of their crew learned how the "other half" lives—even if it were only for a day. So they made the transfer of men at sea by boat.

It proved a fine opportunity for the destroyermen to dive in the submarine and become the "hunted" instead of the "hunter" during an antisubmarine exercise. For the submariners aboard *Lowe* during the exercise, it gave them a chance to actually see what was going on.

SIDELINE STRATEGY

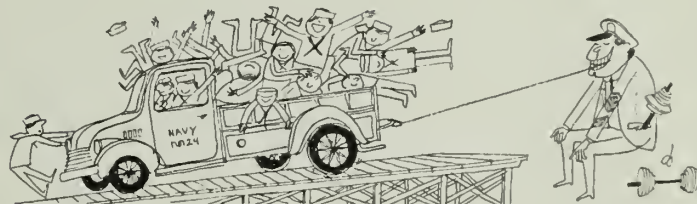
JOHIN WAREING, ADC, USN, Physical Culturist and Athletic Director at NAS Oceana—although probably the last to admit it—is, without a doubt, the number-one candidate for the title "Strongest Man in the Navy."

When the average person hears of his many remarkable and unbelievable stunts, they usually classify them as pure scuttlebutt. But seeing is believing, and that's just what many Navymen and their dependents at Oceana are having the opportunity to do.

The Chief Aviation Machinist's Mate's feats of strength, many of which haven't been duplicated, have brought him to the limelight, not only in the Navy, but to millions throughout the world. He's been featured in magazines,

conditioning" and training. Chief Wareing, who attributes his original interest in physical culture to his father, a prominent New York trainer and masseur, began his training at the age of 14. He originally had his sights set on a boxing career but gave that up in 1940 when he began his many accomplishments of physical culture and feats of strength.

His war record is also one of valor and honor. Chief Wareing was awarded the Distinguished Flying Cross for outstanding service during World War II and the Air Medal in the Korean conflict. He has wrestled, boxed, played football, and has, he thinks, performed every job for the Navy that has any connection with physical training. He may be found each day giving



countless newspapers, and on national television shows.

To give you an idea of his "superman" qualities, Chief Wareing can lift the rear end of an automobile with his legs, the rear end of a pick-up truck with his back, pull a Navy pick-up truck loaded with 15 men up an incline with his teeth, and, also with his teeth, hold back a motorcycle under full power.

Then he's credited with doing a feat which has never been duplicated. By relying on the strength of his back and powerful legs alone, he can hold back a car that has been fully accelerated. He performed this for a well-known television show.

Such feats are mastered only after years of "all-around con-

instruction and supervising classes at Oceana.

★ ★ ★

ALL HANDS would like to give credit where credit is due, and in this case it's to the U. S. Marine Corps Detachment assigned to the Headquarters of CinCNELM in London, England. These rugged leather-necks are the only U. S. service unit in the United Kingdom to field a rugby team. Although their record is not one of many victories, they have met the best team the British have to offer and have defeated two of the strongest clubs in London. Win or lose, the CinCNELM Marines are impressing rugby fans with their enthusiasm and spirited play.

—H. George Baker, JOC, USN



UP LIFT — Navy's *Regulus II* is loaded aboard Air Force C-124 for delivery to Point Mugu for testing.

TWO INTERCONTINENTAL BALLISTIC missile units of the Strategic Air Command have been activated at Cooke Air Force Base, Calif.

The 576th Strategic Missile Squadron is SAC's first operational ICBM squadron, and the 393rd Missile Training Squadron (ICBM) will serve as the training organization. Mission of the 393rd will be to train the 576th and other squadrons for SAC's expanding missile program, preparing them to accept the intercontinental range missiles when they become operational.

SAC's ICBM squadrons will be trained at Cooke Air Force Base for deployment to Francis E. Warren Air Force Base, Cheyenne, Wyoming, and other missile sites as they become available.

In another move involving ballistic missiles, the Air Force has awarded a contract for the systems management of a Ballistic Missile Early Warning System.

The system will use existing communications to the

maximum, including the DEW Line in Canada and Alaska, and will operate in conjunction with the SAGE system.

It will be designed to detect enemy missiles at maximum distance from the North American continent and to provide early warning for North American Air Defense Command, the Strategic Air Command and Civil Defense agencies.

The over-all program will be managed by the Air Force Ballistic Missile Division in Los Angeles, which is responsible for the development of the *Thor*, *Atlas* and *Titan* ballistic missiles.

★ ★ ★

THE SURGEON'S SCALPEL detects a suspicious growth deep within the body. A piece of tissue is removed and sent to the pathology lab for study and identification. Soon a large TV screen in the operating room flickers into life with the color image of the tissue as viewed through a microscope.

The pathologist discusses his findings with the surgeon over an audio system as he views on a TV screen in his office the area of the operation as seen by an overhead TV camera. A decision is made—and the operation goes on.

This is modern medicine as practiced at the Army's Walter Reed Medical Center where medical training has entered a new era through the use of color television.

One of the principal pieces of equipment used by the Medical Center's Television Division is a specially designed TV microscope mount. This unit can transmit the entire field of vision of several standard types of microscopes onto a 6-by-4-foot screen. A large group of students can study a micro-organism simultaneously without taking turns at a microscope and can see each cell as it is explained by an instructor.

Color TV installations have proven invaluable in teaching operating room techniques. The overhead camera follows every move of the surgeon's skilled hands while he lectures through a microphone inside his sterile mask. A similar unit is located in the ceiling of the autopsy suite at the Armed Forces Institute of Pathology where the main studio is located.

The Walter Reed TV network studio can put on elaborate stage productions for the education of students. Viewers of the closed circuit programs have seen hospital wards, plush conference rooms and battle ground scenes, all originating from this studio. Also, the studio can record programs in live color on 16-mm. motion picture film for showing at other installations.

★ ★ ★

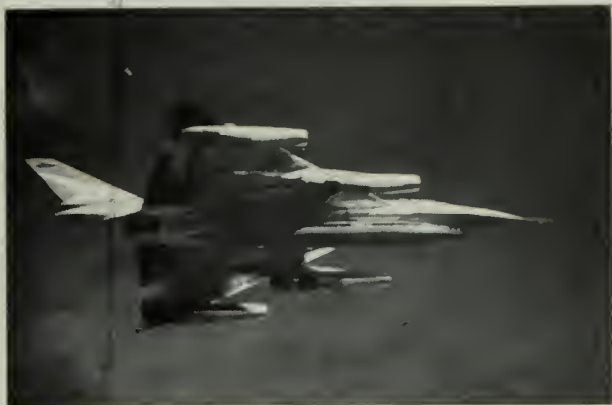
A RESCUE BASKET which "scoops up" an injured or unconscious man out of rough water has been developed by the Air Force for air-sea rescue operations.

The new rescue device is lowered from a helicopter and then lifts the victim together with his life raft. A canvas sea anchor is used to stabilize the basket and tilt it to slip under the survivor. With one man operating the device from the helicopter, it is no longer necessary to lower a rescuer into the water to assist the survivor.

In recent tests the rescue operation—including assembling, rigging, lowering the basket to the survivor and lifting it safely—took less than five minutes.



WATCH THE BIRDIE—Signal Corps specialists check telescope, lens barrel of 100-inch reconnaissance camera.



SSSSWISH—Air Force B-58 Hustler bomber flew faster than sound, more than an hour and a half during tests.

THE FIRST *Bomarc* training unit has been activated at Elgin Air Force Base, Fla.

Designated as the 4751st Air Defense Missile Wing, the unit will develop and conduct a training program for *Bomarc* missile units.

The *Bomarc*, a surface-to-air missile, is capable of ranges up to 250 miles at supersonic speed. The long-range interceptor missile, designed to engage and destroy enemy planes far out from their intended target, has been successfully tested at Cape Canaveral, Fla., and is now in production. On one test, the *Bomarc* scored a kill on a high-flying drone aircraft over 100 miles away, attacking the target from above 60,000 feet. The *Bomarc* is rocket-launched and cruises on twin ram-jet engines. It weighs 15,000 pounds at take-off, is about 47 feet long and may be equipped for either conventional or atomic capability.

The training program is designed to have *Bomarc* missile crews ready for *Bomarc* operational squadrons when the missile sites are completed.

Four *Bomarc* missile sites in Maine, Massachusetts, New York and New Jersey have been announced.

★ ★ ★

PLANS FOR CONSTRUCTION of the Army's first operating field model nuclear power plant, to be located in Alaska, have been announced.

The Plant, at Fort Greeley, Alaska, 60 miles south of Fairbanks on the Alaskan Highway, will generate both electricity and heat for the post and will be modeled after the prototype plant in operation at Fort Belvoir, Va. It will answer the problem of supplying conventional fuel in a remote area.

Power furnished by nuclear fuel will be available to the military commander for the operation of modern weapons and other equipment even though normal supply lines might be disrupted by enemy action. One loading of nuclear fuel will operate the reactor for an extended period, while conventional power plants require thousands of tons of fuel for a comparable period of operation.

The Fort Greeley reactor will produce 42,000,000 BTU per hour in steam for space heating and about 1700 kilowatts of electricity.

The first prototype, APPR-1, has been in operation since last spring at Fort Belvoir, where it feeds elec-

tricity into the post's electric system. Its primary objectives are research and development operation and training atomic power plant operators for field plants such as that to be installed at Fort Greeley.

★ ★ ★

A TANK-MOUNTED, MINE-EXPLODING roller is under development by the Army.

Capable of withstanding antitank mine explosions, the roller clears pressure-activated mines before the tank tracks reach the danger point. Fabricated of high strength steel, the roller is made up of a series of wheels four feet in diameter and six inches thick, mounted on independent axles. The tank in combat pushes a six-wheel section in front of each track. The weight of the roller is sufficient to explode any buried mines that may be in its path.

The outer circumference of the roller wheels incorporates a special design which eliminates blank spots in ground coverage. Individual roller wheels are articulated to assist in more even ground pressure and to help absorb the shock of exploding mines.

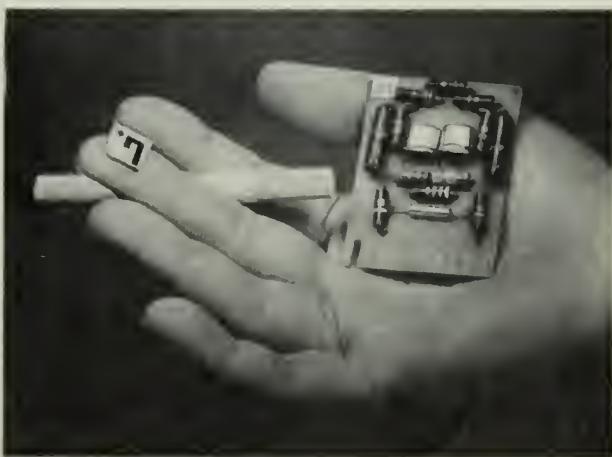
Designed for field installation on standard tanks without modification to the vehicle, the attachment does not hinder the fighting capabilities of tanks.

★ ★ ★

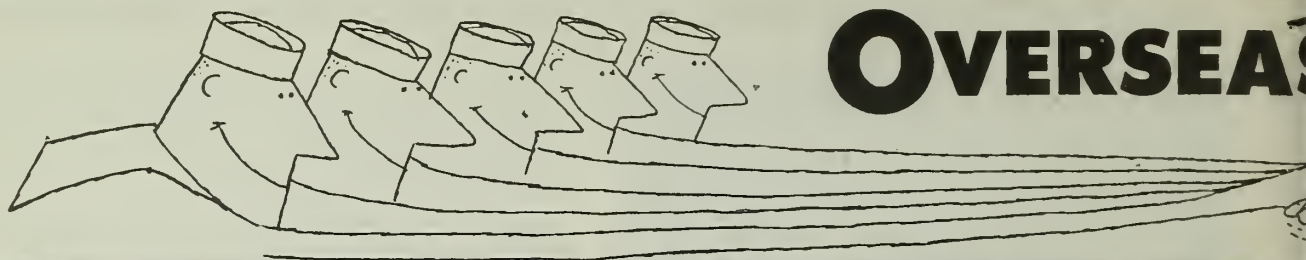
TRANSISTORS, the small devices used in place of electron tubes to help make electronic equipment more compact, may now be made even tinier thanks to the Army's development of the printed circuit transistor.

With the printed circuit technique—in which patterns of conductive and resistive materials are stencilled or etched on non-conductive bases to form electrical circuits without wires—it will be possible to reduce the size of a transistor to a mere spot, only about one 20th of an inch wide and one 100th of an inch high. The new item will be especially useful in such things as the electronic brains of guided missiles.

Some equipment can probably be reduced to one tenth of its present size through use of the new transistors. And, in addition to their compactness, the printed circuit transistors will also offer advantages in increased reliability and resistance to shock or vibration.



HANDY — New Army printed circuit transistor (small dot upper left of board) is compared with present transistor.



OVERSEAS

PLAN your expedition

Your ship's library will have travel books, encyclopedias, magazines for background material on the port you're heading for. Suggest sharing this dope with shipmates via ship's paper.

A copy of official language and pocket guides will come in handy.

Self-study courses are available.

Automobile associations, diners' clubs and travel agencies will be able to supply you with free maps and information.



LANGUAGE- Words for the wise

Try anyhow. Speak slowly. There will be people who know English, but it's a mark of respect if you make a conscientious attempt to learn the local language. It's easier than you think.

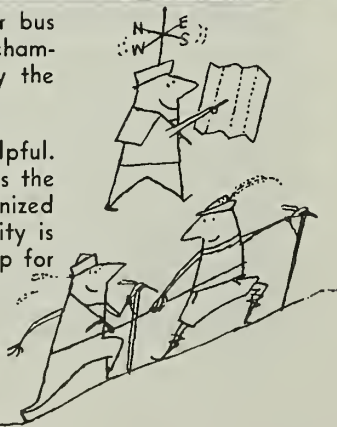
Learn enough at least to pronounce the name of the port you are in the way the people who live there do. How to say "hello," "thank you" and "goodbye" is your basic start.



GUIDED RIGHT

Get a map (at railway or bus station, travel agency, or chamber of commerce). Study the city before you start out.

Guides are sometimes helpful. The best guide, however, is the friend you make. An organized group tour of the whole city is advisable to mark your map for places to go later.



DISCOVER for yourself

Start fresh in forming opinions of people. Get rid of out-of-date, distorted ideas based on old-fashioned geography books, some movies and current gossip. You'll find that people in every country are much the same as at home when you get to know them.

Refer to them by the name they prefer to call themselves. Example: it's Scotsman, rather than Scotchman.

It may be exciting down at the docks, but don't stymie yourself. Get to see other parts of town. Discover new places and people.

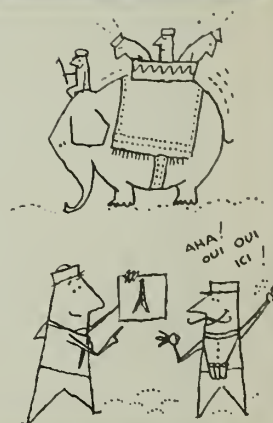


RIDE in style - "local style"

Ricksha, calesa, or taxi—set a price before you get in. Write it out if you're in doubt.

Streetcars can be an adventure. Experience is the best teacher.

Be sure you carry enough small change—don't flash large bills. If you can't speak the language, carry a small map; mark or write out the address you want to go to. Practice courtesy, same as at home.

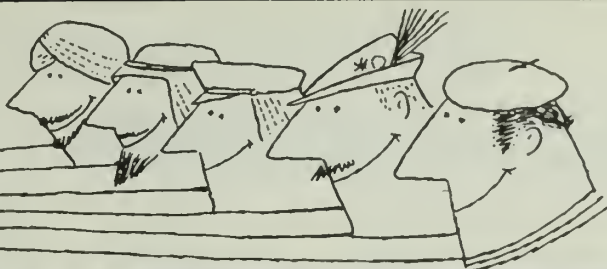


DOLLARS and sense

You're asking for trouble changing dollars into local currency except at authorized agencies, a bank, or large hotel. Travelers checks are best for large amounts. Overtipping is unnecessary. Don't tempt pickpockets.



MANSHIP



GOOD TASTE- Fun in eating

Take advantage of local specialties. Get out your language guidebook and practice the "please," "thank you," "delicious," and "more" routine.

Go easy on a live ail and items you're not used to. Check ship's doctor's advice on local water, milk and fresh fruit and vegetables. Then use tact in refusing such items. Order bottled water and other recommended substitutes.

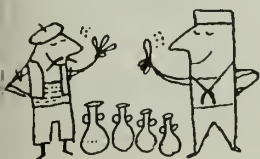
Don't leave a lot on your plate just to be casual, especially in an area that has a food shortage.



SPENDING money and time

Go on your general tour first. Note the items that you'd consider appropriate gifts from that land. Why buy from the first hawker who approaches you? Seek out the factory or craftsmen who make gifts and see how it is done. Learn something about what you buy.

In some countries bargaining is the accepted procedure. Treat it as a game. Keep your sense of humor.



TRAFFIC-Same old problem

Familiarize yourself with local driving habits, signs and symbols whether you will be driving or not—for safety's sake. Keep an eye on cyclists, kids and old folks—just as at home.



MEETING people in your trade

The common ground of your job is one good way to build friendships with local inhabitants. If you're a machinist's mate, look up the local machine shop to exchange ideas. Cooks aboard ship can ask permission to "talk cooking" with restaurant and hotel chefs. If you came from a farm, look up the local farm machinery agent for a custom-tailored tour. Medical carpenters will be welcomed by local hospital personnel.



DANCING-Steps in the right direction

Here is a natural for getting to the heart of the people. Our own rock-n-roll has been adapted in many areas—in exchange, find someone to teach you some of the strange but simple traditional dance steps; for example, Greek syrtos, Spanish sardana, schattische of northern Europe, Arabian dabke, and the universal polka.

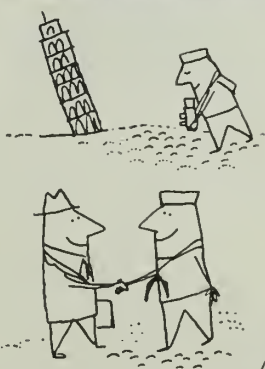
Don't be surprised if you run into groups doing American square dances.



CHANCE of a lifetime

Lifetime savings are spent by Americans to see the places your ship brings you to. Take advantage of the opportunities to visit world-famous sites and outstanding events, like music festivals, trade fairs, ski meets, folk festivals.

Get away from the Fleet landing and meet some really representative people of the country.



continued on next page

OVERSEASMANSHIP *continued*

LONELY HEARTS CORNER

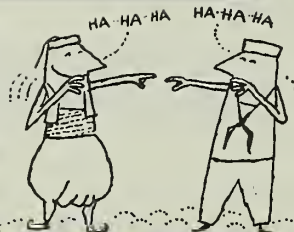
Get away from the usual dack-side routine and meet people on the basis of a camman interest other than what they "expect of seagoing men." For example—fraternal organizations, trade guilds, music, churches, and folklore societies are keys to contacting families and fellow craftsmen.

Americans are higher paid than service persanell of other cauntries. Don't antagonize your NATO fellow servicemen by trying to win over their girls on the basis of making a "splash" with more money to spend.



COURTESY and CURIOSITY

You'll get along fine if you observe the usual courtesies current in the U. S. Show an interest in things you don't understand. Folks will be flattered and happy to explain local "strange customs."



EXCHANGE and LEARN

No better way to build friendship than to let them know they have something to offer you. Set up a magazine exchange with sameane, far example.

If you're stationed in one spot far awhile, take advantage of local educational opportunities—music, language, sculpture, scientific and technical studies.



PICTURES for posterity

Ask permission first. Respect local taboos on picture-taking of religious ceremonies, veiled women, etc. Send your subject a copy as a pleasant surprise—you'll be welcome next time.



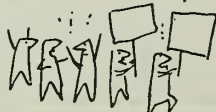
SOUND GROUND

You may not find the same sa-cial activities programs as state-side religious organizations, but you will find that the solid camman denominator of religion will breach all barriers (including language) in meeting the real people of an averseas community.



DANGEROUS GROUND

Yaur private opinian could be interpreted as afficial so stay out of discussions of local polit-ical situations. Be a gaad lis-tener. Don't make camparisons between their cauntry and the U. S



MUSIC—the right note anywhere

Everyone knows this language.

Find out about a country through its music. Visit music shaps and buy their current hits and sheet folk music to ex-change with your musician friends back home.

Most city folk will know Ameri-can popular music and are in-tensely interested in learning about it. Can you answer ques-tions about U.S. musical trends?

The world loves a musician—take your harmonica along.



RIGHT DRESS!

If allowed to wear civilian dress, remember that eccentric clothes and flashy shirts are out af order in same areas and may arouse undue criticism.

Avoid the "tourist" look.



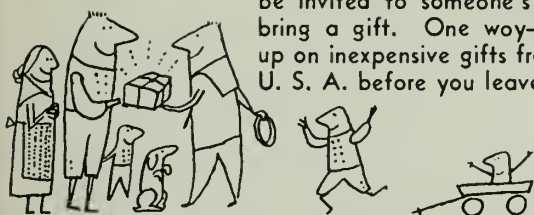
PATIENCE pays off



Accept local conditions with dignity—not all U. S. plumbing is perfect. Word off persistent howkers with o genuinely polite phrose in their longuage.

VISITING firemen and friends

If you ore fortunote enough to be invited to someone's home, bring a gift. One way—stock up on inexpensive gifts from the U. S. A. before you leave.



FAMILY FUN



Inquire about local froternal or-gonizations overseas (like Lions Club, Kiwanis, women's clubs, veterons groups, folklore socie-ties) that can give you ond your family help in joining in local activities. Exchange with local fomilies—everything from recip-es ond dolls to baseball hints ond fishing secrets.



KIDS—the same everywhere

They can help or hinder you. Use judgment in encouraging their services. Be friendly but firm. Your spore time will be welcomed at local Boy Scout groups ond sports clubs.



DIG THAT HOBBY wherever you are



People everywhere have the some interests. Motorcyclists, coin ond stamp collectors, gui-torists, sports car fons, leather-crofters will make lifelong friends ond conctos for future visits ond correspondence by seeking out those people inter-ested in the some leisure-time activities.

Check the phone book for list-ings. Naturally, the dictionary comes in hondy again.

PLAY IT COOL and CALM



It is unfortunote that most times liberty oshore is limited ond there's o noturul inclination to "crom." But remember this may be your chance of o lifetime to meet people whose chance of o lifetime is to meet you.

The impression you moke can be o losting one, so moke it good.

WRITE—folks are interested in you



You may poss this woy ogoin, so keep addresses of your new friends on file. Remember them with o Christmos card or o copy of those snopshots you took. You might even send one to their relatives in the U. S. A.



Keep the folks ot home posted on your discoveries ond trovel odvntures. Enclose o snopshot.

YOU are the stranger



You ore the stranger ond visitor overseas. In uniform or out, you ore truly a representative of your country. Don't criticize local conditions. Be prepared to on-swer questions about Americo. Be quietly proud but don't brog about the U. S.

LETTERS TO THE EDITOR

USS Adonis

SIR: For some time I have wondered what happened to the ship I spent two years on while in the Navy. Originally she was LST 83, then recommissioned ARL-4 in 1943 and later became RL 4 (Adonis).

I went aboard her in October 1943 for a tour of duty that was to include Ireland, England, Normandy invasion, back to the U. S., then on to Pearl Harbor, Guam and Shanghai, China, where I left to come home for discharge.

I wonder if any of your staff can obtain for me information of what happened to Adonis after I left her.
—C.R.W., Woods Hole, Mass.

• According to the Naval Vessel Register *uss Adonis (ARL 4)* is "Out of Commission in Reserve." She is moored along with many other World War II ships with the Pacific Reserve Fleet in the Columbia River.

Adonis is but one of 33 landing craft repair ships still carried on the Navy's rolls. Only *uss Krishna (ARL 38)* and *Pandemus (ARL 18)* are still active. Three of the ships have been loaned to foreign governments—Vietnam, Turkey and Korea.

Adonis was commissioned in July 1943 as LST 83, but she was changed to ARL 4 one month later. She was decommissioned in January 1947 and placed "In Reserve." The ARL 4 is 328 feet long, and displaces 2220 tons of sea water.

It is suggested that you write to Chief of Naval Operations (Attn: Op 291 SH) Navy Department, Washington 25 D. C. for a history of Adonis when it is compiled.—ED.

Performance Test

SIR: Can a YNSN who successfully passed his performance test for YN3 take the YN2 performance test before being promoted to third class?—E.J.F., PN1, USN.

• No. Although this has not previously been spelled out, forthcoming instructions cover such a contingency. Instructions for the administration of performance tests during 1958 will conclusively state that an individual may take the performance test for the next higher pay grade ONLY. A change to "Instructions for the Administration of Service-wide Examinations" (NavPers 15828C) now being prepared by the Bureau, will contain the same provisions.—ED.

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

Seavey and 'Forced Moves'

SIR: The purpose of this letter is to inquire into the effectiveness of the Seavey/Shorvey Personnel Distribution System from the point of view of the enlisted man. It is understood by many that the purpose of Seavey/Shorvey is to enable personnel to be able to plan more efficiently their transfers either to sea or to shore duty, as well as permitting individuals to have some voice in their selection of duty.

Although the life span of this system is very short, there appears to be dissatisfaction among persons within the rates of second class petty officers and above. Citing instances would make this a lengthy piece of correspondence. To be sure, someone has to suffer when a new system is put into effect. But if this policy continues, how is the career Navyman to benefit by this elaborate method of personnel distribution?

Using an HMC as an example, I am particularly interested in that portion of BuPers Inst. 1306.62A which states that consideration would be given men completing seventeen years' naval service. Known transfers during the months of November, December and January indicate that the Bureau desires to drive "old timers" into the Fleet Reserve by issuing men transfer orders to some activity other than that requested when their Seavey/Shorvey cards were submitted.

To squelch continuous "coffee cup politics," are statistics available indicating what proportion of men have received orders to their 1st, 2nd, 3rd or 4th choice of assignment upon the completion of rotation tour date? The consensus seems to indicate that many men are unhappy with their transfer orders, with the usual wording, "needs of the service" being predominantly used throughout.—R. B., HMC, USN.

• A total of 56 HMCs with over 17 years' service have been ordered, during the current effective period of segment three of the Seavey, to a normal tour of shore duty in the continental U. S. Only two of the 56 have been ordered to duty in an area OTHER than their duty preference as indicated on the

Seavey. The fact that the two HMCs who were ordered to duty other than their choice were both ordered from the duty station where you are attached, may have prompted your thoughts on the subject.

It should be clearly understood that under certain conditions "forced moves" are required under Seavey procedures. These forced moves are indicated to distributors by "signal-listings" of personnel on overseas service whose tours are expiring. These signal lists are prepared monthly and indicate personnel whose tours are expiring during the month transfers are to be effected for routine Seavey availabilities. For example, in January 1958, routine Seavey availabilities are processed for transfer during April 1958. Hence, personnel with an OST of April 1958, and having sufficient obligated service, are made available during January 1958.

The necessity of the forced move is two-fold: (1) The relief for an enlisted person has been ordered for replacement by the Fleet Commander to arrive on board during the month the individual's overseas tour expires. Failure to transfer the personnel during the month their OST dates expire would cause a doubling-up of personnel on overseas service; (2) If the Fleet Commander transferred these personnel to duty aboard a ship, awaiting BuPers orders to a normal tour of shore duty, it is conceivable that an individual could receive two sets of orders simultaneously or within short periods of each other. In most instances this would require a SecNav Find (SecNav approval) before execution of the last orders, if a second dislocation allowance

Cut-Off Date for Seavey

SIR: My sea duty date started in January 1956. I have completed two years' sea duty but, so far, haven't received a shore duty card. Could it be because the cut-off date was December 1955, forcing me to miss out by only one month? If this is so, when will rotation cards under Segment Three be sent out?—R.P.N., HMC, USN.

• If you think that you have problems by missing out by one month, think of some of the others—those who missed out by one day. A cut-off date must be made somewhere. Rotation cards for the next submission of Segment Three of Seavey will be mailed by Fleet PAMIs 15 Jun 1958.—ED.

in the same fiscal year was involved.

In some instances the area of choice is not available to the enlisted man during this forced move period, necessitating a transfer to an area based on the "needs of the service." Consistently, HMCs and HMIs prefer duty in the 6th 8th, 9th, 11th, 12th and 13th Naval Districts. Desires for duty in the 1st, 3rd, 4th, 5th, PRNC and SRNC area are few in number. It is only natural that the situation requires the distributor to draft personnel for these so-called undesirable areas.

The normal procedure for drafting personnel into areas other than their choice is to draft from the bottom of the Seavey, that is, personnel with the least total years of active naval service. However, as in the two instances mentioned, on forced moves, it is necessary at times to apply the draft principle to enlisted personnel with over 17 years of active service, particularly in those instances whereby an individual on forced move would move to an area of choice ahead of others senior to him on the Seavey. Every consideration and conceivable possibility is looked into so as to avoid this misassignment to senior petty officers. At times, under the circumstances that exist, it is unavoidable.

The Seavey procedure, as described in BuPers Inst. 1306.62A, points out that emphasis is placed on length of naval service, duty history, and completion of tours. It further emphasizes that preferred sea duty is just as desirable to, and equally merited by, other men on sea duty. Equal opportunity to preferred sea billets, as in the Hawaiian area, is in the interest of consistency, fairness, and efficiency to the same extent as rotation to shore duty. Therefore, it is concluded that it is administratively unfeasible to extend OSTs for personnel solely to wait until they can be ordered to duty of their choice, and it is inconsistent with the policies and intent established under the new concept of Seavey/Shorvey rotation. —Ed.

Two Holes in One

SIR: In the January 1958 ALL HANDS you listed the names of the men who have received BuPers Achievement Awards. On page 43 you state that only four Navymen have received two hole-in-one trophies. Our own John J. Keimig, DKC, USN, listed on page 44 was not included among the "selected four." He also lays claim to two such awards.

We of the "Wandering Wo" and especially those in the Disbursing Office feel that our Chief has been overlooked.—The Gang in the Pay Office, USS Woreester (CL 144).

• Right you are. Chief Keimig should have been included among those who were mentioned as having received two hole-in-one awards.

We have also been informed that



SMART SHIP — Crew of Colombian patrol frigate ARC Capitan Tono (PF 12) lines up to receive Smart Ship Award Plaque donated by U.S. Naval Mission.

we overlooked another individual who belonged in the ranks with the "selected few."—Ed.

SIR: For shame!

You have aroused the wrath of a woman whose husband has been scorned. He does not seek recognition for his skill as a pilot in the Navy's mighty air arm. He does not seek reward for years of faithful service to his country. He does not seek plaudits as the ideal father of six children—BUT dog-gone-it, you might at least have mentioned his two (repeat two) holes in one.

In your article entitled "Here's A Rundown on Navy Awards," you not only neglected to mention his first ace on 23 Apr 1955 at the Wack Wack Country Club in Manila when he drove 216 yards with a two iron, but also ignored his other big moment when he made his second ace on 22 Sep 1957 at the Carlisle Country Club which he scored with a nine iron from 144 yards.

These feats are on record with the Bureau of Naval Personnel and are not to be taken lightly.

In addition, in 1953 at Fort Bragg, N. C., competing against members from our sister services and representing the Navy in a gold tournament, he won first place. This may not seem to be an earth-shaking event to you but, mister, I have to dust these trophies and I love them.

Although he may never recover completely from the shock of the blow dealt him by the omission of his name from the list of award winners, he struggles bravely to hide his hurt. I feel, however, that some recompense is due him.

How do you propose to make up



PLAQUE for Smart Ship Award is presented to crew members of Colombian frigate by their CO during ceremonies at Cartagena, Colombia.

for this oversight?—Mrs. A. M. Gill.

• All we can think of at the moment is a very quiet, small, "Yes, ma'm." However, we think if you will check back to the February 1956 issue of this very humble publication, you will see that the tenth man in the second column shows we believe in giving credit where credit is due.

Probably other Navymen have also received BuPers Athletic Achievement Awards since the article appearing in the January issue was written. We anticipate a follow-up story in the near future. Is all forgiven?—Ed.



INTERNATIONAL cooperation gives Colombian School new radar mast.

This Is the Way to Get Things Done Fast

SIR: Last summer the U. S. Naval Mission to Colombia, South America, received an SA-2 air search radar sent through the Military Assistance Program, used for training at "Escuelas Tecnicas" (Technical Schools) at the Colombian Navy Training Base, Barranquilla, Colombia. The U. S. Navy has a detachment of one officer and four CPOs at the base to assist in the establishment of training curricula and the installation and use of training aids and devices. Consequently, the task of installing the radar fell to them, but before they were finished it had become an inter-service as well as an international operation.

With the assistance of a few Colombian technicians, Jules Wetekamm, ETC, USN, took on the job of installing the radar set. One of his first problems was the installation of a "bed-spring" antenna on the roof of the school building. A platform was erected at one end of the building at a height of 40 feet in order to avoid radar

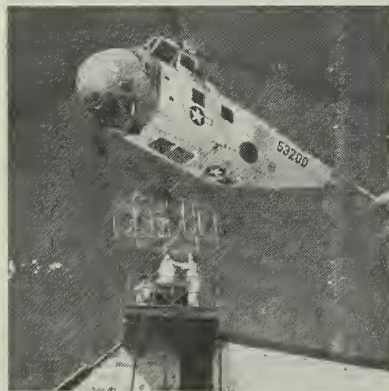
shadow. However, there was no crane nor derrick in the city of Barranquilla with a boom of sufficient length to lift the antenna up to its position on the platform.

The problem was solved by the detachment of U. S. Army helicopters stationed at the Caribbean port city with the Inter-American Geodetic Survey. CAPT John G. Duke, USA, looked the situation over and decided that one of his helicopters could lift the antenna into position.

Early the next morning CAPT Duke landed his helicopter next to the school building. With the necessary preparations made he took off, lifting the antenna and its pedestal up and jockeying it into position above the platform. Wind caused the pilot to make several approaches before he was able to hover directly above the platform while the antenna and pedestal were lowered onto the base ring guided by sailors of the United States and Colombian Navies and Army personnel.

Twenty minutes after the helicopter took off with its electronic load the constantly swinging antenna had been steadied, the hold-down bolts tightened and the lines holding it to the chopper released. CAPT Duke and the other Army personnel joined in a salute to a completed job with cups of Navy coffee and were sincerely thanked for their cooperation in accomplishing a task that would have been impossible without their assistance.—J. P. Richards II, LT, USN.

• It is with great pleasure we run your account. This is just one more example of inter-service and international cooperation in the military forces which have made friends around the world for the United States—Ed.



IN PLACE—Army copter hovers over platform as it lowers radar antenna to U.S. and Colombian navymen.

Exams for YNC

SIR: About nine months ago *Navy Mail*, Volume II, was made a mandatory course for advancement to YNC. About four months ago an instruction was issued indicating that the requirement for *Navy Mail*, Volume II, was waived for the February 1958 examinations because of the non-availability of course books.

However, I ordered the course from the Correspondence Course Center. I received everything but the book. I still have not been able to obtain it.

The first 20 questions on my February examination for YNC concerned the Navy Postal System. Will these count in determining our final grade? If they do it would seem to be unfair to those of us who could not take the course, or even talk to a teleman.—W.E.B., YN1, USN.

• True, the February 1958 service-wide exams for YNC contained questions on *Navy Mail*, but these questions will NOT count for or against those participating. Arrangements were made at the Naval Examining Center so that these questions will not be scored by the machines.—Ed.

Overcoat or Raincoat?

SIR: *Uniform Regulations* lists the blue overcoat under required items of uniform for officers and chiefs and the blue raincoat as optional until 1 Jul 1960.

Is, or is not, the blue overcoat required at the present time, if you already have the raincoat? Naval Uniform Shops have put out the information that the blue raincoat is good until 1 Jul 1960.—W.A.B., YNC, USN.

SIR: Having been stationed in Washington, D.C., for the last three years, I had paid little attention to the elimination of the officer and CPO raincoat (in 1960) from the authorized uniform list. Only today, after being on a rain-soaked bridge of a destroyer for three solid hours, did I realize what fine protection a Navy raincoat provides and what a mistake it seems to be to retire it from use.

Is there any chance that the Uniform Board might "walk the cat back," that is, reverse its decision concerning the officer and CPO raincoat?—P.F.E., CDR, USN.

• The status of the raincoat as part of the naval uniform for officers and CPOs has been misunderstood by many. Since the overcoat is listed in the CPO and officer minimum outfits it must be in your possession regardless of whether or not you have the blue raincoat. A commanding officer can, at his discretion, prescribe the overcoat as uniform of the day, liberty uniform, for inspections or in other instances.

Consequently, the raincoat listed as an optional part of the uniform, may

only be worn in lieu of the overcoat where the commanding officer has not specified otherwise. The raincoat will be removed from the optional uniform list in 1960 and will no longer be considered a part of the uniform.

The Uniform Board has recognized that the medium-weight overcoat which will replace both the bridge coat and the raincoat, is not as water repellent as the whipcord garment. The fabric from which it is made has been water-repellent treated and it should withstand moderate to heavy rain.

However, a fleet trial of an inexpensive, lightweight, blue raincoat for officers and CPO's is underway. If adopted, it and the medium-weight overcoat should together provide adequate protection from the elements.

The Uniform Board is not infallible in making its decisions and, in the face of overwhelming evidence that it had decided in error, the Board would certainly reverse a decision such as was the case in changing the enlisted blue trousers from the 13-button design to a zipper fly, and back again.—Ed.

Large Size Medals

SIR: What are the present plans regarding distribution of the Korean and National Defense Service Medals?

In view of the recent directive that all hands will wear large medals on certain occasions, it would be nice if these medals could be distributed soon. — R. E., LT, USN.

• The Bureau is taking positive steps to make these medals available to active duty personnel just as soon as circumstances will permit.

A stock of the medals is being accumulated, part of which is on hand and part on order. It is expected that distribution to eligible officer and enlisted personnel, on a phased schedule and on the basis of bulk requests from commanding officers for eligible personnel of their commands, can be begun in the near future. Official instructions will be published at that time.—Ed.

Gold Service Stripes

SIR: A question has arisen concerning the wearing of gold service stripes and insignia by CPOs and POs who are eligible for gold. I had always assumed that the 12 years' previous service all had to be "good conduct." However, paragraph 1202.6(d) of U. S. Navy Uniform Regulations says, "... who have not less than 12 years' continuous active duty" ... "during which time they have fulfilled the requirements necessary for the award of the Navy Good Conduct Medal, shall wear gold lace service stripes on blue uniforms in lieu of scarlet stripes. Having once acquired the right to wear gold lace service stripes that right continues throughout the

Souvenir Books

In this section ALL HANDS prints notices from ships and stations which are publishing souvenir records and wish to advise personnel formerly attached. Notices should be directed through channels to the Chief of Naval Personnel (Attn Editor, ALL HANDS) and should include approximate publication date, address of ship or station, price per copy and whether money is required with the order.

uss *Thetis Bay* (CVHA 1)—preparations are being made for publication of a cruise book covering the period from pre-commissioning to 1 Jan 1958.

If you are interested in obtaining a cruise book, you may send your order to the Cruise Book Committee, uss *Thetis Bay* (CVHA 1), c/o Fleet Post Office, San Francisco, Calif. The cost is \$3.00 and orders will be on a "first come — first served" basis.

duration of an enlisted person's service unless in an enlistment subsequent to the one in which the right is established he fails to qualify for a Navy Good Conduct Medal, in which case the right to wear gold stripes shall be terminated."

The word "during" as in "during which time," is defined as (1) through the whole time of, and (2) at some time in. If it is meant to be "at some time in" the 12 years' continuous active service, then the petty officer who re-

ceives a Good Conduct Medal for the 10th, 11th, and 12th year of service, regardless of previous awards, does rate wearing gold service stripes and rating badge.

The wording of the rest of the paragraph quoted above would seem to emphasize this view.—J. B. H., LCDR., USN.

• "During which time" means for the entire duration of the previous 12 years. Under the present rules of eligibility for the Good Conduct Medal, a man would, therefore, have to qualify for four consecutive Good Conduct awards before he could wear the gold rating badge and gold service stripes.

For information, the sentence which you quoted beginning with, "Having once acquired . . ." has been clarified by change 4 to "U. S. Navy Uniform Regulations" to read:

"Having once acquired the right to wear gold lace service stripes that right continues throughout the duration of an enlisted person's service, unless subsequent to the right being established, he fails to qualify for a Navy Good Conduct Medal, in which case the right to wear gold stripes shall at that time be terminated; and in addition if the enlisted man is convicted by court-martial, and the conviction has become final within the meaning of Article 76, 'Uniform Code of Military Justice,' the right to wear gold stripes shall be terminated."—Ed.



SEEING THE WORLD—D. Johnstone, ADAN, Reservist from NAS Minneapolis, enjoys tea with His Excellency the Pasha Abdel el Alaoui in Morocco. Left CAPT J. L. Counihan, USN, Commander, U. S. Naval Activities, Port Lyautey.

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, *ALL HANDS* Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• *16th Seabees*—The sixth annual reunion will be held in Santa Rosa, Calif., on 25, 26, and 27 July. Details are available from the 16th Seabee Association, 1246 Addison St., Berkeley 2, Calif.

• *58th Seabees*—A reunion will be held at the Henry Hudson Hotel, New York City, on 18, 19 and 20 July. Additional information may be obtained from Harry T. Feby, 2834 Devereaux St., Philadelphia 49, Pa.

• *Saco*—U. S. Naval Group China—The fourth annual reunion will be held at the Hotel Warwick in New York City on 1 and 2 Aug. Further information is available from Gus Bruggemann, 159 Highview St., Mamaroneck, N. Y.

• *uss PC 1264*—All who served on board from April 1944 until decom-

Ship Reunions

missioning and who are interested in holding a reunion in New York City this spring are invited to write to CDR E. S. Purdon, USNR, PIO Headquarters, First Naval District, 495 Summer St., Boston 10, Mass.

• *Fifth Marine Division*—The annual reunion will be held at the Hotel Roosevelt, New York City, 27-30 June. For details, write to CAPT D. J. Emilio, USNR (Ret.), 82 North Sixth St., Newark 7, N. J.

• *uss Hornet* (CV 8 and CV 12)—The 10th annual reunion will be held at the Pick-Carter Hotel in Cleveland, Ohio, on 21 June. For information, write to Thomas Laub, President, *uss Hornet* Club, 158 Sheffield St., Bellevue, Ohio.

• *uss Phoenix* (CL 46)—The fifth annual reunion is scheduled for 7 June, at the Penn Sherwood Hotel in Philadelphia. Write to Carl Hardee, 2311-B Wake Rd., Northeast Village, Philadelphia, Pa.

• *Radio Materiel School*—All RMS graduates, staff members, and their families are invited to the annual reunion on 7 June to be held in

McLean, Va. For additional information, write to LCDR Nelson Cooke, 508 North Pitt St., Alexandria, Va.

• *Submarine Veterans of World War II*—The fourth annual reunion is scheduled for 14-17 August, in St. Louis, Mo. Further information may be obtained from Ernst T. Rosing, 1409 S. East Ave., Berwyn, Ill.

• *uss Daniel A. Joy* (DE 585)—All who served on board during World War II and who are interested in holding a reunion, with time and place to be decided, may write to Thomas P. Sullivan, 845 Belmont Ave., Brooklyn 8, N. Y.

• *uss Fall River* (CA 131)—Crew members who served from commissioning to 1946 and who are interested in holding a reunion in September write to Joseph N. Murphy, 61 Capitol St., New Bedford, Mass.

• *25th Special Naval Construction Battalion*—All former members who are interested in holding a reunion with time and place to be decided may write to LT E. H. Cowley, CEC, USNR (Ret.), 24007 Russell Rd., Bay Village, Ohio.

Terminology: 'Able Seaman'

SIR: In "Yesterday's Navy" of your December issue there was a small error. You said: "On 13 Dec 1775 the Continental Congress passed legislation which raised the pay of an able-bodied seaman to eight dollars a month."

There has never been such a rate as able-bodied seaman, either in the Merchant Marine or the Navy. It's able seaman.

In the Truxton-Decatur Museum in Washington, D. C., there is a copy of a recruiting poster from the days when John Paul Jones was looking for merchant seamen to man *uss Ranger*. On that poster are the words, "Forty dollars will be paid every able seaman" who joins the Navy.

And, in the Merchant Marine, Royal Navy and Merchant Navy they still sign on as able seamen.—H. B., AB, U. S. Merchant Marine.

• You're absolute right—it was an error. But if we had only put quotes around able-bodied seaman, it wouldn't have been an error at all.

We got our information from Charles Oscar Paullin's "Navy of the American Revolution." In that book Paullin correctly cited a resolve of the Continental Congress, made on 13 Dec 1775, in which the term "able-bodied seaman" was definitely used. However, in the "Rules for the Regulations of the Navy of the United Colonies," which was largely the work of John Adams, and in other papers of that period, "able seaman" was used.

The Naval History Division of the Office of the CNO, has this to say on the

subject: "Although, as indicated in the resolve of the Continental Congress, the term 'able-bodied seaman' was well known, the proper usage was and is, 'able seaman.' Of course we do not use the designation in today's Navy, but the laws affecting the licensing of merchant sailors specify 'able seaman.'"

Webster's unabridged dictionary and the "Encyclopedia of Nautical Knowledge" (Cornell Maritime Press, 1953) would both seem to be on our side. Here is how Webster puts it:

"able-bodied sea'man. A sailor who is practically conversant with, and able to perform, all the duties of a sailor, and who has a special rating and higher pay than the ordinary sailor. Abbreviated A.B. Chiefly English."

(Incidentally, under able seaman, the same dictionary merely refers the reader to definition for able-bodied seaman.)

The "Encyclopedia of Nautical Knowledge" gives this definition:

"Able seamen, usually abbreviated A.B. (able-bodied) are employed in the deck department, qualified by experience (usually three years sea service on deck), and capable of performing all duties required in management, maintenance and operation of his vessel . . ."

Nevertheless, the Naval History Division tells us, ". . . the abbreviation 'A.B.' is used, but the rating is 'able seaman' and your correspondent is correct."

We're willing to abide by their decision but, as you can see, if we did make a mistake we were traveling in pretty good company at the time.—Ed.

PUCs for HM with Marines

SIR: I was with the 1st Marine Division from 15 Sep 1950 to 10 Aug 1951. I'd like to know how many Presidential Unit Citation awards the following outfits in the Division earned:

"B" Company, 1st Medical Battalion from 15 Sep 1950 to 9 Apr 1951

3rd Battalion, 7th Marine Regiment from 9 Apr 1951 to 12 Jul 1951

"B" Company, 1st Medical Battalion from 12 Jul 1951 to 10 Aug 1951.

Many thanks for your troubles. —J.D.R., HM2, USN.

• The First Marine Division (Reinforced) earned the following Unit awards for service during the Korean Conflict:

Presidential Unit Citation (4th award) 15 Sep-11 Oct 50—Inchon, Korea

Presidential Unit Citation (5th award) 27 Nov-11 Dec 50—Chosin Reservoir, Korea

Presidential Unit Citation (6th award)

21-26 Apr 51

16 May-30 Jun 51

11-25 Sep 51

Navy Unit Commendation

11 Aug 52-5 May 53

7-27 Jul 53

During the period of service indicated in your letter, you would be entitled to the 4th and 5th awards of the Presidential Unit Citation awarded the first Marine Division.

But for official determination of your own eligibility for these awards, we suggest that you send your request via the chain of command to Chief of Naval Personnel (Attn: Pers E3), Department of the Navy, Washington 25, D.C.—Ed.

We've Got You Sized Up

SIR: Upon entering the Navy in June 1953, I had to wait eight or nine weeks before I received my full issue of clothing. When I served with the Fleet Marine Force I again had to wait some time before I had a full issue of Marine Corps clothing. All this is because of my size—height, six-foot-six, and weight, about 260 pounds.

As you can see, my problem is not exactly a small one, so I'm asking you for help. How does one in my position, replacing the initial issue, obtain uniforms?—R. O. L., HM2, usn.

• *It's easy to see why your patience, and perhaps your uniforms, are wearing thin. However, there is a very simple solution to your difficulties.*

In accordance with "BuSanda Manual," paragraph 42091, you should submit a request for unusual-size clothing on Sanda Form 133. Your supply officer should have copies of the form.

Hope that covers the subject.—Ed.

Commencement of Sea Tour

SIR: In September 1953 I was detached from *uss Tilefish* (SS 307) for duty under instruction at Pittsburgh, Pa., and Arco, Idaho. From Arco I was transferred to Supervisor of Shipbuilding, Groton, Conn., in January 1954 for duty in connection with the commissioning and fitting out of *uss Nautilus*, SS(N) 571. I've been on board *Nautilus* ever since the beginning of her builder's trials.

My question is: Does my sea duty count from the time I reported to *Tilefish* or did it start when *Nautilus* went into service (July 1954)?

I would also like to ask a question about the following:

Several men here have gone from sea duty to the Naval Nuclear Power

Training Units either at Arco or at Schenectady, N. Y. Some of them remained there for periods ranging up to two years, either in operational or basic courses of instruction. Yet, their orders read, "... for duty under instruction for a period of about one year." Upon completing their instruction they were transferred directly from these units to *Nautilus*.

The question is: Does their period of duty under instruction count as sea duty?—G. W. F., TMC(SS), usn.

• *Since you were transferred from a sea activity (Tilefish) to duty under instruction and you successfully completed the course, then returned to sea duty, your sea tour commencement date remains unchanged. It is the date you first reported to Tilefish.*

The answer to your other question is more or less the same. The men involved were transferred from sea activities to duty under instruction, then back to sea duty upon successful completion of their courses. Therefore, the time they spent under instruction would count as part of their continuous sea tours.—Ed.

Safety First Glasses

SIR: Was just enjoying your February issue of ALL HANDS but, since I am working in Aviation Safety here at Corry Field (Pensacola, Fla.), I was curious as to why the sailor in the picture on the front cover is not wearing glasses.

There are many statistics and statements concerning the loss of sight, but the most compelling question I remember is: "There are 12 factories in the United States that make safety glasses. Why?"—Terry Phares, ABAN, Corry Field.

• *OK. We get the point.—Ed.*

Retirement as CPO or Ensign

SIR: I have a question concerning retirement pay. Here is the story. A CPO is completing 30 years' active duty this month. On 15 Sep 1943 he was advanced to the rank of warrant. On 5 Dec 1944 he became an ensign. He reverted to CPO 26 May 1946. On what rank will his retirement pay be based? If based on the highest rank held (ensign), is it possible that he would receive less money than if his retirement was based on the rank of warrant?—H.W.T., FTC, usn.

• *A CPO who retires with 30 years' active service and who has served in higher temporary ranks is advanced after retirement to the highest rank in which he satisfactorily served and his retired pay is based on that rank. There are no provisions whereby he may elect retired pay based on any temporary rank other than the one which has been determined by the Secretary of the Navy to be the highest rank in which he satisfactorily served. However, he does have the right to revert to his permanent enlisted rating if he submits his request within one year from the date of advancement on the retired list and his request is approved by the Secretary of the Navy.*

Now, on the question of whether or not he would lose money if his retirement pay is based on the pay of an ensign, the answer is no. Figure it this way (based on present pay scales for over 30 years: As an E-7, base pay is \$335.40—retirement pay is \$251.55. As a W-1, base pay is \$368.20—retirement pay, \$276.15.

As an ensign (his highest rank), base pay is \$374.40—retirement pay is \$280.80. Any way you look at it, this Chief Petty Officer will make more money by retiring as an ensign.—Ed.

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THE WORD

Frank, Authentic Advance Information On Policy—Straight From Headquarters

• **SELECTED FOR OFFICER'S TRAINING**—More than 220 enlisted men have been selected and are currently undergoing training that will lead to a commission as ensign in the Line and Staff Corps of the Regular Navy.

They were selected under the Navy's integration (Seaman to Admiral) Program.

The officer selectees are currently undergoing 16 weeks of officer candidate training at the U.S. Naval Schools Command, Newport, R.I. They will receive their commissions upon successful completion of the schooling.

Of the 223 selected, 200 were chosen for the unrestricted Line and 23 for the Supply Corps. An enlisted Wave and three warrant officers were among those selected. The others were all male petty officers—ranging from third class to CPO.

• **MEDALS NOW AVAILABLE**—The National Defense Service Medal and the Korean Service Medal are now available for distribution to eligible personnel serving on active duty.

In accordance with BuPers Notice 1650 of 27 Feb 1958, commanding officers and officers in charge should request these medals for eligible personnel assigned to their activity, from the Commanding Officers, U.S. Naval Supply Depot, Scotia, N. Y., or the U.S. Naval Supply Depot Clearfield, Ogden, Utah; whichever is closer.

Quantities requested should not exceed the number of personnel on board who are eligible for these medals.

Distribution of the National De-

fense Service Medal and the Korean Service Medal has been deferred until this time because sufficient funds were not available to procure them.

The initial distribution of these medals is being made at no cost to eligible personnel on active duty. Replacement medals, however, will cost \$1.00 each in instances where the originally issued medal has been lost through neglect.

• **PERMANENT PROMOTION TO LTJG**—Ensigns holding permanent commissions of the Line and Staff in the Regular Navy will receive permanent promotions to the grade of lieutenant (junior grade) on the third anniversary of their date of rank as ensign.

In accordance with BuPers Inst. 1426.1A commanding officers are directed to order eligible ensigns to report for physical examinations about two months before the anniversary of their date of rank as ensign. All eligible officers should insure that their last regular fitness report has been forwarded to the Chief of Naval Personnel.

The mental, moral and professional phases of the examination will be conducted solely on each officer's record by the Naval Examining Board.

• **GI LIFE INSURANCE**—The GI Life Insurance account for more than 1,300,000 servicemen and veterans have been transferred from the VA Insurance Center, Washington, D.C., to Philadelphia.

Affected by the move are the ac-

counts of persons holding U.S. Government Life Insurance (USGLI), which originated in World War I; and those holders of World War II or post-Korean policies of National Service Life Insurance (NSLI) who are paying their premiums by allotment from their active duty or retired military pay, and persons who reside in foreign countries.

Correspondence concerning GI insurance account formerly serviced by the Washington Insurance Center, should now be addressed to: Veterans Administration District Office, Post Office Box 8079, Philadelphia 1, Pa.

• **AM, PR RATING CHANGES**—Further changes in rating in the AM and PR ratings, made to conform with modifications of the Enlisted Rating Structure, have been approved by the Secretary of the Navy.

BuPers Notice 1440, of 6 March, authorizes commanding officers to:

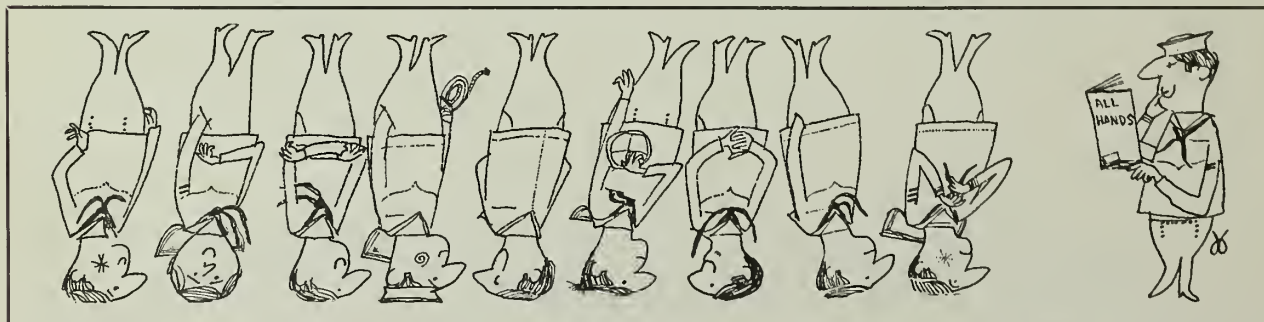
- Disestablish the Emergency service Ratings of Parachute Rigger S (Survival) and Parachute Rigger M (Maintenance), and transfer duties of the present Parachute Rigger M to a Service Rating of the Aviation Structural Mechanic.

- Disestablish the General Service Rating of Aviation Structural Mechanic at pay grades E-4 and E-5.

- Disestablish the Emergency Service Ratings of Aviation Structural Mechanic S (Structural Mechanic) and Aviation Structural Mechanic H (Hydraulic Mechanic) at pay grades E-6 and E-7.

- Establish a Service Rating of Aviation Structural Mechanic E (Safety Equipment) at pay grades E-4 and E-5 to assume duties of present Parachute Rigger M.

- Redesignate as "general ratings" the General Service Ratings of Parachute Rigger (PR) and Aviation Structural Mechanic (AM). Redesignate as "service ratings" the Emergency Service Ratings of Avia-



WE'D ALL STAND on our heads for a copy of the current issue of ALL HANDS. Pass this one on to your friends.

tion Structural Mechanic S (AMS) and Aviation Structural Mechanic H (AMH), at pay grades E-4 and E-5.

Here's how the changes, which must be accomplished between 30 August and 1 December 1958, will be made:

- All men at present in PRS rates will be changed to PR (Parachute Rigger).

- All men now in PRM rates will be changed to AME (Aviation Structural Mechanic, Safety Equipment).

- All men in pay grades E-6 and E-7 in AMS and AMH ratings will be changed to AM.

- All men now in AM2 or AM3 rates will be changed to AMS2, AMS3, or AMH2 or AMH3 considering the training, background experience and NEC codes of the individual concerned.

- Men in the present PRM rating who wish a change of rating to PR (instead of AME) and any men in pay grade E-4 and E-5 of the present PR rating who wish to change to the AME rating, may submit individual requests to the Chief of Naval Personnel (Attn: Pers B223).

Waves are being phased out of the PR rating, but until those now in this rating have completed their retraining and have had their rating changed, they will be carried as PRs.

- **BUPERS MANUAL CHANGES**—Change No. 27 to the *Bureau of Naval Personnel Manual* contains information of interest to all. This change includes:

Up-to-date information regarding programs for procurement of Regular Navy officers.

Revised qualifications for Officer Candidate Training Programs.

Revised instructions to permit granting 30 days' advance leave to personnel reenlisting in the Regular Navy regardless of time elapsed since last discharge.

Instructions for reductions in rate which are effected by commanding officers as non-judicial punishment.

Instructions for qualifications for Naval Aviation Observers (Navigation).

Outline of policy on administration of discipline involving confinement and other types of restraint.

Revised minimum evaluation requirements for honorable discharges.

Revised minimum evaluation retention of enlisted personnel beyond normal terms of enlistment.

Revised separation procedures to authorize enlisted personnel entitled to travel time upon release to inactive duty to perform travel via privately-owned vehicles when they execute a certificate to the effect that they actually intend to perform travel by such means.

Revised duties of chaplains.

Revised instructions for burial services.

- **USNR OFFICERS SELECTED FOR USN**—The names of 220 Naval Reserve officers recommended for permanent appointment in the Regular Navy by the Augmentation Continuing Selection Board have been announced.

Of the selectees, 167 are line officers with 3 of these in the Restricted Line. Fifty-three are in the Staff Corps.

Numbers to receive appointments, provided they meet all administrative requirements, are: Line, 58; Line Women, 11; Aviation Line, 95; Special Duty Law, 3; Supply Corps, 20; Supply Corps Women, 2; Chaplain Corps, 8; Civil Engineer Corps, 3; Medical Service Corps, 4; Nurse Corps, 16.

- **ABSENTEE VOTING ASSISTANCE**—Are you and your dependents aware of your voting rights and privileges?

If not, you will be before the general elections in November, with the help of the stepped up Absentee Voting Assistance Program. The Navy provides you and your family with information concerning your voting rights through this program.

Since the Federal Voting Assistance Act was passed in 1955, most states have made legislative and administrative changes in election procedures to assist servicemen in casting absentee ballots in state and national elections.

The Navy's Absentee Voting Program is designed to keep you informed of these changes and advise you of your voting rights and privileges. The Chief of Naval Personnel, through BuPers Notice 1742 of 26 March, has established a four-phase program to assist commanding officers in carrying out an effective voting program. It's intended to provide you with absentee voting information and to encourage all naval personnel to exercise their voting franchise.

If you have any questions don't hesitate to check with the Voting Officer aboard your ship or station.

QUIZ AWEIGH

Almost daily the new Navy continues to take on the new look. This is because the dream ships of tomorrow are becoming today's reality, while the older, more familiar ones are leaving. Here are a few questions. Give them a try and see if you're keeping pace with the many changes.

1. Among the newest additions to "Today's Navy of Tomorrow," is the world's third nuclear powered submarine. She's (a) USS Sargo (b) USS Skate (c) USS Triton.



2. Termed as a "production model of our underseas nuclear Fleet," this 267-foot submersible as a/an (a) attack craft, (b) missile launcher, (c) radar picket sub.

3. The biggest ship to join the Fleet in recent months was the 60,000-ton USS Ranger. The CVA-61 is an attack carrier of the (a) Midway Class (b) Forrestal Class (c) Essex Class.



4. Ranger will form the backbone of one of the Navy's mighty (a) anti-submarine groups, (b) fast carrier striking forces, (c) mobile IRBM launching sites.

5. While new nuclear submarines and gigantic carriers are joining the Fleet, the last of battleships was retired. The last BB to join the mothball fleet was (a) USS Iowa (b) USS Missouri (c) USS Wisconsin.



6. The decommissioning of our last battleship brought to an end an era of dreadnaughts in the U. S. Navy which dates back to the early 1890s. Our first battleship to bear the hull number BB-1 was (a) USS Maine (b) USS Texas (c) USS Indiana.

Good luck! In the event you need to check the answers, you'll find them on page 46.

THE BULLETIN BOARD

Here's Roundup on State Bonuses for Veterans of Korea, WW II

NAVYMEN WHO SERVED during the Korean War, or during World Wars I or II may be eligible for one or more of the state bonuses listed in the following roundup.

To apply for a state bonus you will need a copy of your *Notice of Separation from the U. S. Naval Service* (NavPers 553) or *Report of Separation from the Armed Forces* (DD 214) and an application blank provided by the state.

If you are on active duty you may request your commanding officer to certify your service in the appropriate space on the application form by using your service record or other documents available to him. However, if the information cannot be obtained from available records you will have to make a statement under oath and this information will be included in your CO's certification.

No requests for detailed information as to your foreign service or other service data should be requested from the Bureau of Naval Personnel.

To be eligible to make application for a state bonus you will have to obtain proof of your residence. In most cases the home address you gave at the time of your enlistment or entry into service does not constitute complete proof of your legal residence.

Your legal residence will have to be substantiated by such documentary evidence as voting registration, tax data, etc.

All Navy veterans who need copies of their separation documents may request them from the commandant of the naval district in which they are currently residing. If you have moved to another naval district since your separation and these documents are not in the possession of the commandant, when he receives your request he will in turn request a certified copy from the district in which your separation papers are permanently retained and it will be forwarded accordingly.

This summary of state bonuses granted veterans of World War I,



World War II, and those with service during the Korean conflict is based on the latest information available. Procedures for making application are outlined below. Changes and additions will appear, when necessary, at a later date.

State Bonuses for Veterans of Korea

Many states have enacted laws providing bonuses for Korean conflict veterans. Individual states which are currently accepting applications and specific information concerning these laws are provided below. If you consider yourself eligible, submit an application for consideration to the adjudicating agency of the state. It should be noted that the Bureau of Internal Revenue has ruled that state bonuses received by veterans and active duty personnel will NOT constitute taxable income for federal tax purposes. Other states have authorized bonuses but the deadline date for submission of application has passed.

IOWA

Amount: \$10.00 per month for domestic service. \$12.50 per month for foreign service. \$500.00 maximum.

Service: Active duty in the Armed Forces of the United States between 27 Jun 1950 and 27 Jul 1953. Separation from service under honorable conditions. Persons still in service or retired from active service may apply.

Residence: Resident of State of

Iowa at least 6 months immediately preceding date of entering service.

Deadline: 31 Dec 1960, applications are not expected to be available until late 1958.

Note: Necessary funds for bonus must be raised by sale of bonds bearing 2½ per cent interest. This low interest rate which is required by the State of Iowa Bonus Law will make the bonds difficult to sell and may delay bonus payments.

MASSACHUSETTS

Amount: \$300.00 for foreign service. \$200.00 for more than 6 months' active service in the United States. \$100.00 for 90 days of stateside service.

Service: Minimum of 90 days' service between 25 Jun 1950 and 31 Jan 1955 inclusive.

Residence: Six months immediately prior to entry in military or naval service.

Deadline: None.

Next of kin: If veteran died in service, \$300.00 to eligible survivor, otherwise, only amount he would receive if alive.

Active Duty Personnel: Personnel that have been discharged and re-enlisted subsequent to 25 Jun 1950, and are serving regular enlistment contracts may apply. Three years on active duty subsequent to 25 Jun 1950 are required for indefinite enlistees and commissioned officers. It should be noted that a photostat of the "Report of Separation from the Armed Forces of the United States" (DD Form 214) must be filed with the application.

Information: Benefits have been established by the Massachusetts State legislature to commissioned officers, warrant officers, or indefinite enlistees who have served at least 3 years on active duty from 25 Jun 1950 and who have not yet been discharged or released under honorable conditions from such service. Such applicants must attach to application form a statement from commanding officer verifying period of service.

For applications: Commandant (DCRO), First Naval District, 495

Sumner Street, Boston 10, Massachusetts.

Address inquiries to: Veterans Bonus Commission, 15 Ashburton Place, Boston 8 Massachusetts.

MICHIGAN

Amount: \$10.00 per month for domestic service. \$15.00 per month for foreign service. \$500.00 maximum.

Service: Minimum of 61 days during period 27 Jun 1950 to 31 Dec 1953.

Residence: Six months immediately prior to entering service.

Deadline: 7 Mar 1958 for veterans. No deadline has yet been established in next of kin cases where veteran is deceased from service-connected causes.

Next of kin: Certain survivors may be eligible for \$500.00 if veteran died while in service or from service-connected causes.

For applications: Commandant (DCRO), Ninth Naval District, Building 1, Great Lakes, Illinois.

Address inquiries to: Adjutant General's Office, State of Michigan, Military Pay Division (Bonus Section), P. O. Box 1401, Lansing 4, Michigan.

MINNESOTA

Amount: If veteran has received (or is entitled to receive) a Korean Service Medal, payment will be: \$15.00 for each month of overseas service. \$7.50 for each month of domestic service. \$400.00 maximum. In case of all other veterans: \$7.50 for each month of overseas and domestic service. \$200.00 maximum.

Service: Service in the Armed Forces between 27 Jun 1950 and 27 Jul 1953. Personnel who served on continuous active duty in the Armed Forces for 4 years prior to 27 Jun 1950 will *not* be eligible to receive the bonus on basis of service.

Residence: Resident of State of Minnesota at time of entering service and for 6 months prior thereto.

Deadline: 31 Dec 1958.

Next of kin: Dependents (survivors) of veteran who was on continuous duty in the Armed Forces for 4 years prior to 27 Jun 1950, and who died from service-connected causes while serving during the period between 27 Jun and 27 Jul 1953, will be entitled to receive amount veteran earned for his service from 27 Jun 1950 to date of

death. Dependents (survivors) of veteran who died after 27 Jul 1953 are eligible to receive bonus earned by veteran.

For applications: Commandant (DCRO), Ninth Naval District, Building 1, Great Lakes, Illinois.

MONTANA

Amount: \$10.00 per month for stateside or foreign service exclusive of Korean theater of war. \$15.00 per month for service in the Korean theater.

Service: Active military service between 25 Jun 1950 and 16 Oct 1953.

Deadline: The Montana bonus law

allows a period of three years for filing claims, from the date of final litigation needed to clear the way for the sale of \$10-million bonds to finance the program.

For applications: Application forms will not be available until litigation has been completed, bonds sold and administrative machinery set up. This is expected to require several months.

Note: Eligible veterans should write to the adjusted Compensation Division, P. O. Box 612, Helena, Montana, and request that their names and addresses be placed on file pending distribution of applica-

WHAT'S IN A NAME

Hedgehogs

Hedgehogs, as used in the fine art of antisubmarine warfare, proved to be one of the greatest answers to a destroyer's prayers in World War II.

These mortar-type projectiles with a body 7.2 inches in diameter and carrying 30 pounds of TNT (or 34 pounds of Torpex) have increased the chances of hitting and destroying enemy submarines.

Until 1942, when the Mark-10 and -11 hedgehogs were adapted by the Navy, the only real weapon against subs was the depth charge. Since sound contacts were broken between 100 and 150 yards from the submarine as it passed under the sound beam, it meant that in any depth-charge attack there was a necessary element of guess between the moments when sound contact on the target was broken and depth charges were released. There was only one "sure" way to get the sub; hold the contact, keep the sub at a distance, and fire charges ahead. This is where the hedgehog had its advantage.

The tail of the hedgehog is placed over a spigot, which contains a firing pin. Each row of spigots is mounted on an athwartships beam or cradle which can be tilted fore and aft. Tilting the cradles results in a slight change of elevation, which is used to compensate for roll and pitch but does not vary the range. There is a power drive for training the projector mount, and an additional elevating power drive to tilt the cradles.

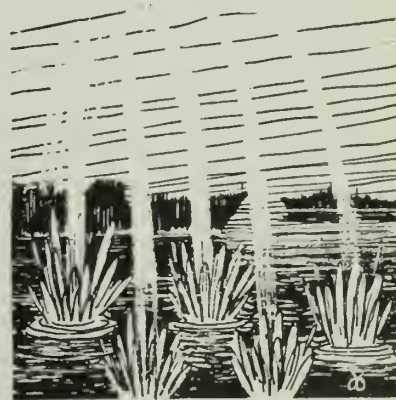
The Mk 15 is a development from the older Mk 10 and Mk 11. Cradles on the older mounts are set fore and aft, and tilting these cradles produces as much as 20 degrees of train. All mounts fire the same 7.2-inch hedgehog projectile. When fully loaded, all mounts hold 24 projectiles.

Hedgehogs are fired electrically in

groups of 24 charges from each mount. Charges are fired in pairs, intervals between pairs being about one-tenth of a second. The 12 pairs of charges are fired in a total time of 1.0 to 1.5 seconds. They are propelled forward by gun-firing charge and explode only on contact. In other words, the hedgehog has no depth setting, and will not detonate by passing near the target—it must score a hit to explode.

Hedgehogs have many advantages over depth charges. They can be launched before contact is lost at short range, and reduce to a few seconds the submarine's maneuvering time after firing. The Mk 10 and Mk 11 mounts can be tilted to give 20 degrees of train, and the Mk 15 provides full gun train. In practical terms this means hedgehogs can be trained and fired while a ship is still coming about to the best attack course.

If hedgehogs do not hit a submarine, there is no water disturbance to interfere with echo ranging. This is not the case when depth charges are used.



tion forms. Any subsequent change of address should be reported to that agency.

NEW HAMPSHIRE

Amount: \$10.00 per month for service up to a \$100.00 maximum.

Service: A minimum of 90 days between 25 Jun 1950 and 27 Jul 1953.

Residence: One year preservice residency.

Deadline: 1 Jul 1958

Next of kin: Survivors of deceased servicemen are eligible for the \$100.00 maximum payment.

For applications: Commandant (DCRO), First Naval District, 495 Sumner Street, Boston 10, Massachusetts.

Address inquiries to: State Adjutant General's Office, State Military Reservation, Concord, New Hampshire.

NORTH DAKOTA

Amount: \$12.50 per month for domestic service. \$17.50 per month for foreign service.

Service: Active service in the Armed Forces of the United States for more than 60 days between 25 Jun 1950 and 27 Jul 1953. Separation from service under honorable conditions. Persons still in service must furnish evidence that such service was honorable.

Residence: Resident of State of North Dakota at time of entering service and for 6 months prior thereto.

Deadline: 15 Feb 1960.

Next of kin: Same amount as for veteran if living but in no case less than \$600.00.

For applications: Commandant (DCRO), Ninth Naval District, Building 1, Great Lakes, Illinois.

Address inquiries to: Adjutant General, Fraire Barracks, Bismarck, North Dakota.

OHIO

Amount: \$10.00 per month for domestic service. \$15.00 per month for foreign service. \$400.00 maximum.

Service: Active duty in the Armed Forces of the United States between 25 Jun 1950 and 19 Jul 1953. Separation from service under honorable conditions. Persons still in service or retired from active service may apply.

Residence: Resident of State of Ohio for at least one year immedi-

QUIZ AWEIGH ANSWERS

1. (b) USS Skate, SS(N) 578
2. (a) Attack craft
3. (b) Forrestal Class
4. (b) Fast carrier striking force
5. (c) USS Wisconsin (BB 64)
6. (c) USS Indiana (BB 1)

The questions to this month's Quiz Aweigh appear on page 43.

ately preceding date of entering service.

Deadline: 31 Dec 1958.

Next of kin: If veteran's death rated service-connected by Veterans Administration; \$400.00 to eligible survivors, otherwise, only amount he would receive if alive.

For applications: Commandant (DCRO), Ninth Naval District, Building 1, Great Lakes, Illinois.

Address inquiries to: Director, The Korean Conflict Compensation Fund, 293 East Long Street, Columbus 15, Ohio.

VERMONT

Amount: \$10.00 per month not exceeding a total of 12 months. \$120.00 maximum.

Service: Honorable discharge from an enlisted status between 27 Jun 1950 and 31 Jan 1955.

Residence: One year immediately prior to entering service.

Deadline: None.

Next of kin: \$120.00 shall be paid to the next of kin of veterans who died from service-connected causes. Next of kin in order are: (1) widow or widower, remarriage does not bar entitlement, (2) next of kin who are lineal heirs, and (3) parents. Amount veteran was entitled to by length of service shall be paid to the next of

kin, in order named above, of any veteran who has died from non-service connected causes.

For applications: Commandant (DCRO), First Naval District, 495 Sumner Street, Boston 10, Massachusetts.

Address inquiries to: Office of the Adjutant General, State Office Building, Montpelier, Vermont.

WEST VIRGINIA

Amount: \$10.00 per month for domestic service. \$300.00 maximum. \$15.00 per month for foreign service. \$400.00 maximum.

Service: Active service in the Armed Force of the United States for 90 days or more, unless discharged earlier for service-connected disability, between 27 Jun 1950 and 27 Jul 1953. Separation from service under honorable conditions. Persons still in active service may apply.

Residence: Resident of State of West Virginia at time of entry into active service and for 6 months prior thereto.

Deadline: Unknown.

Next of kin: Must be state resident when filing application.

For applications: Bonus Division, West Virginia Department of Veterans Affairs, State Capitol Building, Charleston 1, West Virginia.

Address inquiries to: Bonus Division, West Virginia Department of Veterans Affairs, State Capitol Building, Charleston 1, West Virginia.

World War II State Bonuses

The states listed below are still accepting applications for bonus payments from World War II veterans until the designated deadline:

MASSACHUSETTS

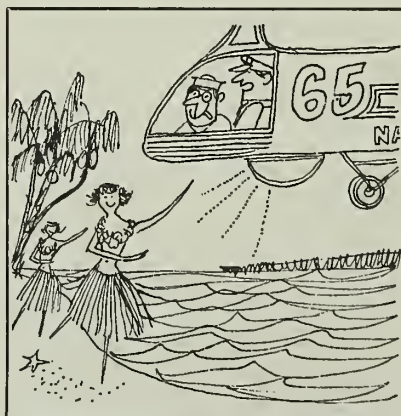
Amount: \$100.00 for domestic service of less than 6 months. \$200.00 for domestic service of more than 6 months. \$300.00 for overseas service.

Service: Service between 16 Sep 1940 and 31 Dec 1946, both dates inclusive. Discharge or release other than dishonorable, or in active service.

Residence: Six months immediately prior to entering service.

Deadline: None.

Next of kin: Survivors of persons who died in service before 31 Dec 1946 may receive \$300.00. Otherwise, amount veteran would receive if alive.



"We're looking for submarines, Larson, just submarines!"

For applications: Commandant (DCRO), First Naval District, 495 Sumner Street, Boston 10, Massachusetts.

Address inquiries to: Veterans Bonus Commission, 15 Ashburton Place, Boston 8, Massachusetts.

NEW HAMPSHIRE

Amount: \$10.00 per month for active service. \$100.00 maximum.

Service: More than 90 days' service between 7 Dec 1941 and 31 Dec 1946, both dates inclusive. Discharge or release under conditions other than dishonorable.

Residence: Bona fide resident at time of entry into service.

Deadline: 1 Jul 1958.

Next of kin: Survivors of veteran who died in active service or subsequent to active service from service-connected causes may receive \$100.00. Otherwise, amount veteran would receive if alive.

For applications: Commandant (DCRO), First Naval District, 495 Sumner Street, Boston 10, Massachusetts.

Address inquiries to: State Adjutant General's Office, State Military Reservation, Concord, New Hampshire.

NEW YORK

Amount: \$50.00 for 60 days or less of domestic service. \$150.00 for more than 60 days of domestic service. \$250.00 for any foreign service.

Service: Active duty between 7 Dec 1941 and 2 Sep 1945, both dates inclusive. Discharge under honorable conditions or still in service.

Residence: Six months immediately prior to service. Residence at time of application requirement removed in November 1949 election.

Deadline: None.

Next of kin: If death occurred in service, next of kin may receive \$250.00. Otherwise, amount veteran would receive if alive.

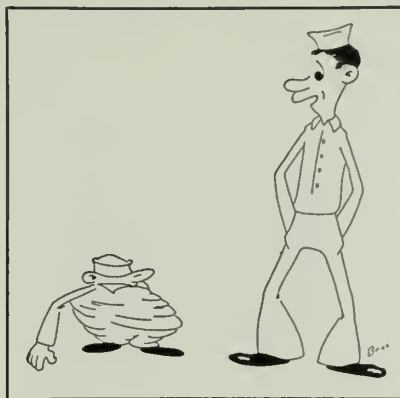
For applications: Commandant (DCRO), Third Naval District, 90 Church Street, New York 7, New York.

Address inquiries to: Veterans' Bonus Bureau, Department of Taxation and Finance, 1875 North Broadway, Albany 4, New York.

VERMONT

Amount: \$10.00 per month (enlisted personnel only). \$120.00 maximum.

Richard M. Brooks, EN3, USN



"What do you mean, the Chief's always jumping on you?"

Service: Active service between 11 Sep 1941 and 30 Jun 1947. Honorable separation.

Residence: Resident at time of entry and for one year immediately prior.

Deadline: None.

Next of kin: Survivors of persons dying in service may receive \$120.00. Otherwise, amount veteran would receive if alive.

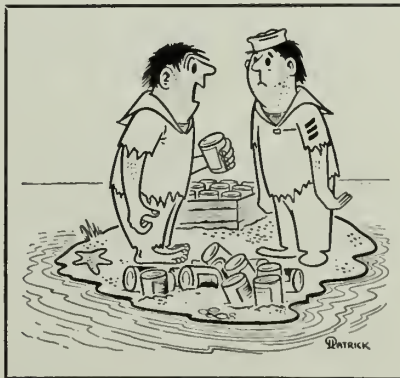
For applications: Commandant (DCRO), First Naval District, 495 Sumner Street, Boston 10, Massachusetts.

Address inquiries to: Office of the Adjutant General, State Office Building, Montpelier, Vermont.

Three New Correspondence Courses Ready for Officers

Three new officers correspondence courses are now available.

Advanced Bases (NavPers 10744) is a four-assignment course, evaluated at eight points for Naval Reserve promotion and retirement purposes.



"You lost the can opener?"

Public Works Department Management (NavPers 10741) is a seven-assignment course, evaluated at 14 points' credit.

Naval Electronics, Part I (NavPers 10925-A) is an 11-assignment course, evaluated at 24 points' credit. This course replaces NavPers 10925. Reservists who completed the earlier course will receive additional credit for NavPers 10925-A, if they are otherwise eligible to receive credit in this subject.

Application for enrollment in these courses should be made on form NavPers 992 (Rev 10/54 or later), forwarded through official channels to the Naval Correspondence Course Center, Scotia 2, N. Y.

New Correspondence Courses Ready, Others Discontinued

Eight new Enlisted Correspondence Courses are now available. Six courses have been discontinued.

Enlisted Correspondence Courses for active duty personnel will be administered (with certain exceptions) by your local command instead of by the Correspondence Course Center. Your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command for administration.

Personnel on inactive duty will have courses administered by the Center.

The new courses are:

New Courses	NavPers No.
* Disbursing Clerk 3	91435-3
* Disbursing Clerk 2	91436-3
Basic Military Requirements	91206
Military Requirements for Petty Officers 3 and 2	91202
* Patternmaker 2	91549-1
* Metalsmith 3	91533-1
Basic Electricity	91224
Chief Aerographer's Mate	91646
* May be retaken for repeat Naval Reserve Credit	

Discontinued Courses	NavPers No.
Bluejackets' Manual	91205-C
Survival in the Water	91218-1A
Aircraft Materials	91616-C
Electricity	91225-C
Fire Controlman 3, Vol. 1	91316-D
Fire Controlman 3, Vol. 2	91317-C

Summary of Legislation of Interest to Navymen and Dependents

HERE'S A SUMMARY of proposed legislation of interest to the Navyman being considered by Congress.

The bills introduced into the House of Representatives are prefaced with the letters "H. R." Those introduced into the Senate are prefaced by an "S."

Further information on some of the more important pieces of legislation affecting the Navy, when enacted, will be carried in future issues of ALL HANDS.

As you read the following, bear in mind that while many bills are introduced into any Congress, some are not enacted into law.

Basic Pay of Service Personnel—H. R. 11470: Revises schedule of pay for officers and enlisted personnel, and provides for proficiency pay for enlisted members of the armed services. Passed House and now awaiting Senate action.

Judge Advocates—H. R. 9818: Provides for the procurement of judge advocates and law specialist officers for the Army, Navy, Air Force and Coast Guard.

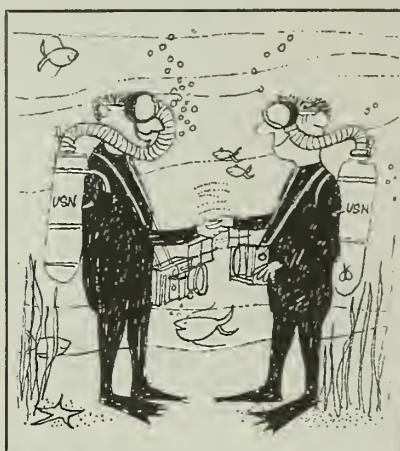
War Orphans—H. R. 9823: Amends the War Orphan's Educational Assistance Act of 1956 to provide educational benefits to the children of members of the U. S. Navy who were killed while on convoy duty in 1941.

College Deferments—H. R. 9843: Amends the Universal Military Training and Service Act to provide for deferment of college students enrolled in science courses, and to allow such students to satisfy military obligations through employment in certain defense industries.

Outer Space—H. R. 9847: Would establish a Commission on Outer Space for the purpose of promoting development and use of rockets, missiles, satellites and spaceships.

Nonprofit Clubs—H. R. 9877: Amends Internal Revenue Code of 1954 to exempt from club dues tax certain charges made by nonprofit clubs for the use of facilities.

War Claims—H. R. 9935: Changes War Claims Act of 1948, as amended to provide compensation for certain World War II losses.



"Why, it's Ed Smith from good 'ole P.S. 147!"

Reserve Contracts—H. R. 9977, H. R. 10171 and S. 3081 would provide term retention contracts for Reserve officers.

Academy Appointments—H. R. 10020 and H. R. 10123: Amend title 10 of the U. S. Code with respect to the nomination of cadets and midshipmen for appointment to the service academies. Would permit appointment of persons domiciled anywhere in state from which the representative is elected.

Medical Care—H. R. 10195: Amends section 103 of the Dependents' Medical Care Act to extend prohibition on dental care to dependents residing in Hawaii.

Nuclear Subs—H. R. 10253: Would authorize Secretary of Navy to construct 100 nuclear-powered attack submarines.

Reserve Retired Pay—H. R. 10313: Amends section 1331 of Title 10, U. S. Code, to provide for granting retired pay to certain Reserves who served on active duty during World War I, World War II and the Korean conflict.

Insurance—H. R. 10380: Amends National Service Life Insurance Act of 1940 to provide for paying an indemnity of \$10,000 to the widow, children or parents of any member of a uniformed service dying after 1956 under circumstances not permitting payment of dependency and indemnity compensation or death compensation.

Pensions—H. R. 10451: Proposes pension of \$100 per month to all honorably discharged veterans of World War I who are 60 years of age.

Military Service—H. R. 10454: Establishes a scholarship program to train scientists and technicians, to provide that scholarship beneficiaries shall be obligated to serve in the armed forces upon completion of their education.

Cash for Suggestions—H. R. 10513: Amends Title 10 of the U. S. Code to provide for the establishment of a program of cash awards for suggestions or inventions made by members of the armed forces.

Olympic Games—H. R. 10654: Authorizes certain activities by the armed forces in support of the VIII Olympic Winter Games.

Medical—H. R. 10534: Provides separate medical facilities for veterans.

Payments—H. R. 10926: Validates payments of certain quarters allowances made in good faith to employees of the Navy Department but which were later determined to be inconsistent with regulations.

Science Academy—H. R. 10931: Provides for the establishment of a U. S. Science Academy.

Social Security—H. R. 11005: Amends Section 224 of the Social Security Act to provide that there shall be no offset against Social Security benefits for disabled persons on account of disability retirement pay for members of the uniformed services.

Veteran Pay—H. R. 11017: Extends veteran benefits to persons serving in the armed forces between 12 Nov 1918 and 2 Jul 1921.

Loans—H. R. 11051: Extends the loan guarantee program for World War II veterans for two years, extends the direct loan program for a like period, authorizes an interest rate on guaranteed and direct loans commensurate with that applicable to mortgages insured under the National Housing Act, increases the maximum direct loan to \$13,500.

Loans—H. R. 11436: Amends the Serviceman's Readjustment Act of 1944 to extend the direct and guaranteed loan programs for two years, provides that the rate of interest be prescribed by the Veterans Administration, eliminates discount controls on such loans.

Aircraft Maintenance — H. R. 11094: Restricts military aircraft maintenance, overhaul and modification functions in government-operated facilities to performance of strictly military requirements that cannot be procured from private enterprise.

WW I Vets—H. R. 11528: Provides benefits to certain veterans of World War I who were in active service on 11 Nov 1918, and their dependents.

Dependents' Medical Care—H. R. 11546: Amends the Dependents' Medical Care Act to provide that retired members of the armed forces, under certain conditions, after having served on active duty in WW I and WW II shall have the same privileges with respect to medical care as members who have retired after having served on active duty for eight years or more.

Veterans' Education—S. 2978: Establishes a program of educational assistance to veterans who served in the armed forces after 21 Jan 1955.

Veterans' Housing—S. 2995: Proposes encouragement of new residential construction for veterans' housing in rural areas and small cities and towns by raising maximum amount of direct loans from \$10,000 to \$13,500, authorizes advance financing commitments and extends the direct loan program for veterans.

Naturalization of Veterans — S. 3009: Amends Immigration and Nationality Act to give Korean veterans equal naturalization privileges.

Dependency Allotments—S. 3015: Permits payment of dependency allotments authorized by the Dependents Assistance Act of 1950 to certain persons performing active duty for training.

Alien Spouses—S. 3040: Would permit certain alien spouses of members of the armed forces to reenter the United States without payment of visa fees.

Retired Pay—S. 3082: Amends Title 10 of U. S. Code with respect to computation of retired pay. S. 3197 authorizes reduced retired pay plus pension or compensation to certain retired personnel of the armed forces who retired before 1 Jan 1957.

Veteran Organizations—S. 3116:

Recognizes certain national non-profit, nonpolitical war veterans' organizations for purposes of bestowing upon them certain benefits, rights, privileges and prerogatives.

Unification—S. 3209: Would provide for greater unification of the armed forces.

Information on bills enacted into law will be covered in detail.

WAY BACK WHEN

Naval Communications

In the old days, because of poor communications, naval warfare was largely a matter of guesswork. The commander of a fleet often had trouble trying to figure out not only what the enemy was up to, but also where his own ships were and what they were doing.

For instance, take what happened when a French fleet slipped through a British blockading squadron off Toulon back in 1798. Although the French were discovered and followed by two British observation frigates, Admiral Nelson didn't receive news of the French escape until eight weeks later. He then spent 30 days trying to find the enemy, who, meanwhile, had put back into Toulon.

In the American Navy one of the earliest records of a signal system was a set of simple maneuver and recognition signs issued by the Continental Marine Committee in 1778. An improved system which had 287 day signals and one night signal (that for "Attack the Enemy!") was worked out by Captain Thomas Truxton in 1797. This was based on 10 numeral flags from zero to nine. Orders were relayed by numbers and combinations of numbers having meanings that could be looked up in a decode.

During the Civil War, when many federal officers went over to the Confederacy, Union signals had to be completely revised. The Bureau of Navigation, which took charge of naval communications in 1862, decided that the Navy should adopt the Army signal system and, as a result, Army-style communications dominated Navy signaling until as late as 1892.

Semaphore came into the Navy in 1861 with a book entitled "Code of the Flotilla and Boat Squadron Signals for the U. S. Navy," which contains illustrations of a hand semaphoric system somewhat similar to the present one, but with a limited number of characters.

In 1864 two forerunners of the present-day flashing light system put in their ap-

pearance. Under one system a lantern, ball or similar object was exposed, or a flag was lowered and raised, in dot-and-dash patterns. In fog or mist the same code could be used for a trumpet blown in long or short blasts. Under the other system the signalman used a canvas cylinder, secured to the shrouds, with a light inside it. The cylinder was held in position by springs and the light could be exposed or screened by pulling or releasing a line attached to the cylinder.

Electricity came into naval signaling in 1875, when experiments with electric lights were conducted. In three years the ranges of these lights were increased from six miles to a distance of nearly 17.

However, it wasn't until the "wireless" came along about 1895 that naval communication could begin to approach the rapidity and long range it has today. By 1905 radio was operational equipment in both the United States and British fleets, and by World War I it had grown so important that the Communications Office in Washington averaged 3200 messages a day.

Since then there have been so many improvements in radio that it's now just as easy to send a message to fleets all over the world as it once was to pass the word to a single ship only a shout's range away.



This Check-Off List Will Help You to Find the Info You Want

NAVAL DIRECTIVES are of necessity constantly changing and many of the changes that are made affect your Navy career in some way. Although the information concerning your service advantages, opportunities and benefits appears in manuals, regulations, or notices, you may have difficulty in locating them. But they are usually available in your ship or station personnel office.

Here's a list of up-to-date directives dealing with career opportunities and programs available to officers and enlisted men classified according to subject matter. It supersedes the list presented in October 1957 *ALL HANDS* pp. 54-56. Remember, notices are cancelled, instructions modified and manuals changed, so check with the personnel man to get the latest word.

Subject	Pertinent Directive or Authority	TRAINING	
ADVANCEMENT OR CHANGE IN RATE OR RATING		GENERAL TRAINING	
General Programs		Enlisted Training Schools and Courses; policy, quotas, eligibility for enrollment	Bupers Inst. 1500.25D Catalog of U. S. Navy Training Activities and Courses (NovPers 91769-C) (BuPers Inst. 1500.391)
Advancement in Rate/Rating: Policy:	BuPers Inst. 1430.7C BuPers Manual (Pt. C, Chap. 7, Sec. 2)	Information and Education Program; policy	Art. D-2103, BuPers Manual, Information and Education Manual (NavPers 16963-C)
Qualification:	Manual of Qualifications for Advancement in Rating	Opportunities Available Through the I&E Program; information concerning	Navy Training Bulletin (NovPers 14900)
Eligibility:	BuPers Inst. 1414.3B	Study Materials for Applicants for Appointment to Commissioned Status under Integration, LDO and Warrant Officer (W-1) Programs; information concerning	BuPers Inst. 1560.12
Naval Reserve:	*BuPers Inst. 1430.1B	Enlisted Correspondence Course	List of Training Manuals and Correspondence Courses (NavPers 10061-F)
Changes in Rate, Rating and Rate Symbols; policy	BuPers Inst. 1440.5B	Navy Enlisted Advance School Program (NEASP); information concerning	BuPers Inst. 1510.69B
Program for Adjustment of the Enlisted Rating Structure Through Formal School Training and Through In-Service Training; establishment of	BuPers Inst. 1440.18A	SPECIALIZED TRAINING	
Training Courses for General Service Ratings	NavPers 10052	Assignment and Reassignment of Personnel in the Naval Air Mobile Training Program; policy	BuPers Inst. 1306.31B
APPOINTMENT TO COMMISSIONED GRADE		Salvage Duty; policy, eligibility	BuPers Inst. 1500.15B, NovPers 91769-B
NAVAL ACADEMY, FLIGHT TRAINING, OCS		U. S. Naval School of Music; applications for courses	BuPers Inst. 1336.2B
Naval Preparatory School	(Art. C-1203), BuPers Manual	Basic Hospital Corps School Class "A"; candidates for	BuPers Inst. 1306.55A
Aviation Cadet Training Program; eligibility, procedures for applying	BuPers Inst. 1120.20A	Assignment of Enlisted Personnel to the Nuclear Power Training Program; policy, eligibility	BuPers Inst. 1540.33A SecNav Inst. 1000.3
Officer Candidate School Program—OCS (Men) OCS (Women) AOC—For Enlisted Members of the Naval Service on Active Duty; policy, eligibility	BuPers Inst. 1120.11A, BuPers Inst. 1120.24, BuPers Inst. 1120.10A, BuPers Inst. 1120.9A, BuPers Inst. 1120.25	Tuition Aid Program; information concerning	BuPers Inst. 1560.10A
SPECIAL PROGRAMS		REENLISTMENT	
Appointment to Commissioned Grade Integration and LDO Programs, Appointment to Warrant grade; information concerning	BuPers Inst. 1120.18D	Reenlistment, Voluntary Extension of Enlistment and Voluntary Retention of Regular and Reserve Personnel on Active Duty; procedure	BuPers Inst. 1133.1C BuPers Inst. 1133.10A
Nursing Education Program; information concerning	*BuPers Inst. 1120.27	Reenlistment Program; information concerning	BuPers Inst. 1133.3C
Regular Navy Augmentation Program; policy, eligibility	BuPers Inst. 1120.12E	Discharge up to 1 Year in Advance of Normal Expiration of Enlistment date in order to Reenlist; policy, eligibility	BuPers Inst. 1133.4A
Appointment to Commissioned Grade, SDO, (Law), 1620; policy, eligibility	BuPers Inst. 1120.21	Reenlistment in the Regular Navy of Naval Reserve Personnel Serving on Active Duty; policy, eligibility	BuPers Inst. 1130.4D
Appointment to Commissioned Grade, Optometry, Pharmacy, and Medical Allied Sciences Sections of the Medical Corps, Regular Navy; policy, eligibility	BuPers Inst. 1120.8A	Assignment to a School for Reenlistment; policy, eligibility	BuPers Inst. 1133.5
Appointment to Commissioned Grade in Administration and Supply Sections, Medical Service Corps, Regular Navy; policy, eligibility	BuPers Inst. 1120.15C		
Nomination of Qualified Enlisted Personnel for the NROTC Program; policy, eligibility	BuPers Inst. 1111.4B		

SPECIAL DUTY AND ASSIGNMENT

GENERAL POLICY

Training and Administration of The Naval Reserve; duty in; policy, eligibility *BuPers Inst. 1001.7A

Retention on Active Duty and Recall thereto of Enlisted Naval Reserve and Fleet Reserve Personnel; information concerning BuPers Inst. 1001.21A

Assignment and Rotation of Enlisted Women; policy BuPers Inst. 1306.10B

SPECIAL ASSIGNMENTS

Transfer and Assignment for Humanitarian or Hardship Reasons; policy, eligibility BuPers Inst. 1306.24A

Assignment to Duty of Sole Remaining Sons; policy BuPers Inst. 1300.11

Assignment to Naval Missions, Attaches, Military Aid Groups, Joint Staffs, SHAPE; policy, eligibility BuPers Inst. 1306.6B

Assignment to Recruiting Duty; policy, eligibility Art. C-5208, BuPers Manual

Assignment to Duty as Instructors; policy, eligibility BuPers Inst. 1336.1A
BuPers Inst. 1306.22C
*BuPers Inst. 1306.42 (applies to musicians only)

Assignment of Enlisted Personnel to Initial Submarine Training and Duty; policy, eligibility BuPers Inst. 1540.2C

Assignment to Reserve Training Submarines; policy, eligibility *BuPers Inst. 1306.38

Assignment to Duty Involving Demolition of Explosives; policy, eligibility BuPers Inst. 1320.5A

PAY, ALLOWANCES, INSURANCE

Soldiers' and Sailors' Civil Relief Act of 1940; summary of benefits under BuPers Inst. 1760.4

Uniformed Services Contingency Option Act; options under BuPers Inst. 1750.1B

Social Security Benefits for Military Service; summary of benefits under BuPers Inst. 1741.10

Mortgage Insurance for Servicemen to Aid in the Construction or Purchase of Homes; policy, eligibility SecNav Inst. 1741.4

SEPARATION AND RETIREMENT

Review of Undesirable and Punitive Discharges; information concerning BuPers Inst. 1626.16

Early Separation Enlisted Personnel to Attend College BuPers Inst. 1910.12A

Retirement, Voluntary and Naval Reserve with/without Pay; policy, eligibility BuPers Inst. 1820.1B
BuPers Inst. 1820.2
SecNav Inst. 1811.3A

MISCELLANEOUS

GENERAL INTEREST

The Navy Relief Society; services by Art. C-9207, BuPers Manual, BuPers Inst. 1747.1A

The American Red Cross; services by Art. C-9207, BuPers Manual, Art. C-10308 (7), BuPers Manual BuPers Inst. 1742.2A

Voting by Members of the Armed Forces; policy

Immigration and Nationality Act of 1952; alien spouses, naval personnel; information concerning SecNav Inst. 1750.1

VA Hospitals; transfer of naval active and retired personnel to; policy *BuMed Inst. 6320.11

Marriage of USN and USMC Person- Art. C-11109, BuPers

nel Outside the United States and Within Far East Command; policy
Visas for Alien Wives and Children of Naval Personnel; information concerning

Participation of Enlisted Personnel in Inter-service and International Athletic Events and Competitions; policy, eligibility BuPers Inst. 1710.1E
BuPers Inst. 1710.2

Summary of State Bonuses BuPers Inst. 1760.3B

Uniformed Services Identification and Privilege Card, DD Form 1173; regulations governing BuPers Inst. 1750.5A

PROGRAMS AND OPPORTUNITIES OF PARTICULAR INTEREST TO OFFICERS TRAINING

GENERAL TRAINING

Schools and Courses Catalog of U. S. Navy Activities and Courses (NavPers 91769-CI)
BuPers Inst. 1500.25D

General Line School; policy, eligibility BuPers Inst. 1520.43

Five-Term College Training Program; policy, eligibility BuPers Inst. 1520.37,
BuPers Inst. 1520.-48A

Completion Naval Aviation College Program for USN Officers; policy, eligibility BuPers Inst. 1520.38

Officer Correspondence Courses; summary List of Training Manuals and Correspondence Courses (NavPers 10061-F)

Tuition Aid Program; information concerning BuPers Inst. 1560.10A

SPECIALIZED TRAINING

Flight Training (HTA); policy, eligibility BuPers Inst. 1520.20A

Underwater Demolition Training; policy, eligibility BuPers Inst. 1520.7

Deep Sea Diving Training; policy, eligibility BuPers Inst. 1520.4C,
BuPers Inst. 1500.15B

Training and Administration of the Naval Reserve; policy BuPers Inst. 1001.10B

Nuclear Power Training Program; information concerning BuPers Inst. 1540.33A

Assignment of Officers of Nuclear Powered Submarines BuPers Inst. 1301.28

ASSIGNMENT TO SPECIAL DUTY

Assignment to Submarine Duty; policy, eligibility BuPers Inst. 1520.6G

Assignment to Special Weapons Program; policy, eligibility BuPers Inst. 1331.1A

Assignment with a Navy Security Group; policy, eligibility BuPers Inst. 1331.2B

Assignment to Duty Involving Demolition of Explosives; policy, eligibility BuPers Inst. 1320.5A

Assignment to Nuclear Power Program; policy, eligibility SecNav Inst. 1000.3

APPOINTMENT

Appointment to Ensign, Integration and LDO Program; policy, eligibility BuPers Inst. 1120.18D

Appointment to Commissioned or Warrant Grade in the Reserve of the U. S. Navy of Resigned Commissioned or Warrant Officers of the Regular Navy; information concerning BuPers Inst. 1920.8A

Appointment of Naval Reserve Aviators to Commissioned Grades in Regular Navy; policy, eligibility BuPers Inst. 1120.14A

THE BULLETIN BOARD

Appointment in the Medical Corps and Dental Corps; Regular Navy; policy, eligibility BuPers Inst. 1120.3E

Law Specialist Program for Reserve Officers of the U. S. Navy; information concerning BuPers Inst. 1120.28

PROMOTION

Professional Fitness for Promotion of Officers on Active Duty BuPers Inst. 1416.1C

Professional Fitness for Promotion of Warrant Officers on Active Duty BuPers Inst. 1416.6

MISCELLANEOUS

Uniform Allowances for Naval Reserve Officers; entitlement and reimbursement for BuPers Inst. 7220.14A

Naval Reserve Officers not on Active Duty; Regulations and Procedures Governing Screening the Ready BuPers Inst. 1821.1A

Reserve and Assignment to, Transfers between, and Discharge From Reserve Categories; policy

Non-Disability Retirement of Officers and Warrant Officers; information concerning BuPers Inst. 1811.1A

Active Duty Agreements; policy, eligibility BuPers Inst. 1120.22B

Change of Officer Designator Codes; procedure, eligibility BuPers Inst. 1210.6

Assignment and Rotation of LTJG and ENS; policy BuPers Note 1301 of 19 Oct 1956

Voluntary Extended Active Duty for Reserve Officers; policy, eligibility BuPers Inst. 1331.4A

Active Duty of Naval Reserve Officers; extension of and release from BuPers Inst. 1926.1C
BuPers Inst. 1926.2A

* Instructions marked with an asterisk were given limited distribution when issued.

List of New Motion Pictures Available for Distribution To Ships and Overseas Bases

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in February.

Jailhouse Rock (999) (WS): Drama; Elvis Presley, Judy Tyler.

Until They Sail (1000) (WS): Drama; Jean Simmons, Paul Newman.

The Black Scorpion (1001): Science Fiction; Richard Denning, Mara Corday.

Time Limit (1002): Drama; Richard Widmark, Richard Basehart.

The Pride and the Passion (1003) (C): Drama; Cary Grant, Frank Sinatra.

An Affair to Remember (1004) (C) (WS): Comedy-Drama; Cary Grant, Deborah Kerr.

The Abominable Snowman of the Himalayas (1005) (WS): Science Fiction; Forrest Tucker, Peter Cushing.

Slim Carter (1006) (C): Drama; Jack Mahoney, Julia Adams.

Gun Battle at Monterey (1007): Drama; Sterling Hayden, Pamela Duncan.

Slaughter on 10th Avenue (1008): Drama; Richard Egan, Jan Sterling.

Les Girls (1009) (C) (WS): Musical; Gene Kelly, Mitzi Gaynor.

Young and Dangerous (1010) (WS): Drama; Lili Gentle, Mark Damon.

The Invisible Boy (1011): Drama; Richard Eyer, Phillip Abbot.

The Monolith Monsters (1012): Science Fiction; Grant Williams, Lola Albright.

The Sad Sack (1013): Comedy; Jerry Lewis, David Wayne.

The Sun Also Rises (1014) (C) (WS): Drama; Tyrone Power, Ava Gardner.

Bombers B-52 (1015) (C) (WS): Drama; Karl Malden, Natalie Wood.

Fort Bowie (1016): Western; Ben Johnson, Jan Harrison.

Tijuana Story (1017): Crime; James Darren, Rodolfo Acosta.

Baby Face Nelson (1018): Crime; Mickey Rooney, Carolyn Jones.

The Enemy Below (1019) (C) (WS): War Drama; Robert Mitchum, Curt Juergens.

Night Passage (1020) (C) (WS): Drama; James Stewart, Audie Murphy.

Escape From San Quentin (1021): Drama; Johnny Desmond.

The Hard Man (1022) (C): Western; Guy Madison, Valerie French.

The Admirable Crichton (1023) (C): Drama; Kenneth More, Diane Cilento.

Rockabilly Baby (1024) (WS): Drama; Virginia Field, Douglas Kennedy.

Plunder Road (1025) (WS): Adventure Drama; Gene Raymond, Jeanne Cooper.

The Green Man (1026): Drama; Alastair Sim, George Cole.

Affair In Havana (1027): Drama; John Cassavetes, Raymond Burr.

The Story Of Mankind (1028) (C): Drama; Ronald Colman, Hedy Lamarr.

Don't Go Near The Water (1029) (C) (WS): Comedy; Glenn Ford, Gia Scala.

My Man Godfrey (1030) (C) (WS): Drama; June Allyson, David Niven.

The Tall Stranger (1031) (C) (WS): Western; Joel McCrea, Virginia Mayo.

That Night (1032): Drama; John Beal, Augusta Dabney.

The Unholy Wife (1033) (C): Drama; Diana Dors, Rod Steiger.

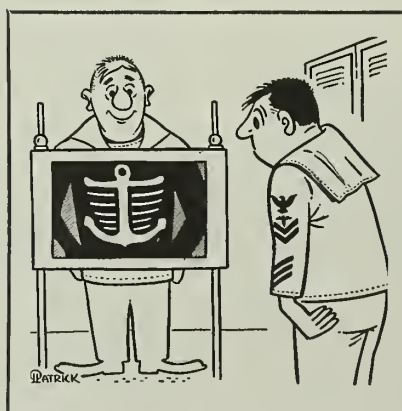
The Tarnished Angels (1034) (WS): Drama; Rock Hudson, Robert Stack.

Action Of The Tiger (1035) (C) (WS): Drama; Van Johnson, Martine Carol.

Man In The Shadow (1036) (WS): Melodrama; Jeff Chandler, Orson Welles.

Ride Out For Revenge (1037): Western; Rory Calhoun, Gloria Grahame.

The Domino Kid (1038): Western; Rory Calhoun, Kristine Miller.



DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instruction, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 3—Requests naval personnel to use permanent home address when corresponding with Internal Revenue Service.

No. 4—Announces the Navy's scientific education school program for enlisted personnel.

No. 5—Congratulates the Army



"Listen, Jones, either you get some submarine pictures or hand in your underwater camera."

on its successful launching of a satellite.

Instructions

No. 1020.9A—Outlines the wearing of civilian clothes by officers on duty in the Navy Department.

No. 1120.29—Places in one source eligibility requirements for officer candidate school programs: OCS

(Men), OCS(Women), and AOC for enlisted members of the naval service on active duty.

No. 1300.23A—Provides information regarding enlisted personnel change of station (PCS) code.

No. 1510.67A—Prescribes procedures for administering enlisted correspondence courses of the Naval Correspondence Course Center to active-duty enlisted personnel.

No. 1740.1—Describes the civilian employment assistance program for retired and involuntarily released personnel.

No. 1900.1C—Lists naval activities within continental United States to which male personnel may be transferred for separation.

No. 1426.1A—Advises USN line and staff officers holding permanent commissions as to the necessary qualifications which must be met and the procedures involved before permanent promotion to LTJG.

No. 1910.16—Authorizes one month early separation of enlisted personnel serving on active duty.

Fleet Sonar Schools Follow Latest Tactics in Antisubmarine Warfare

The modern high-speed submarine presents a major challenge to surface and air sub-hunters of the U.S. Navy.

Down at the Fleet Sonar School, Key West, the CO and his staff hold periodic conferences with one purpose in mind: to combine their experience and abilities in an effort to contribute to the neutralization of this growing submarine threat. Out on the West Coast, the same kind of work is being carried out by Fleet Sonar School, San Diego.

What, specifically, are some of the perplexities facing the anti-submarine force today? Up until the present day, submarines—when submerged—have been severely limited in the duration of time they could cruise or maneuver at high speeds—because of the restrictions of their battery equipment.

Now the picture has been radically altered. With the advent of the fast *Albacore* hull-type and atomic power, there is no longer any limit on a submarine's underwater cruising time at very high speeds. This reality presents the

greatest problem to the surface, air and sub-surface antisubmarine forces.

What is being done about it? The Chief of Naval Operations has directed increased activity in the research and development of anti-submarine warfare equipment and facilities. The goal will be to achieve a "break-through" which will result in much greater detection ranges and longer range underwater weapons, weapons which can overtake and destroy enemy submarines wherever they are encountered.

The problem confronting the Fleet Sonar School is that the development of antisubmarine and pro-submarine tactics, equipment, weapons, and the ships themselves are continually changing. As the submarine force makes a stride forward, the antisub force must be ready with a counter-advance.

In the last stages of World War II, the "hunter-killer task force" was most successful in clearing the seas of enemy submarines. Now, the pendulum continues to swing

one way or the other almost yearly.

The fact that the game is a grim one and that we must be continually seeking new ideas and concepts to combat the deadly—and growing deadlier—submarine is continually stressed at the Sonar School. The staff and students are encouraged to use imaginative initiative in their exchange of ideas. There is no one infallible method for outsmarting a submarine.

To the Fleet Sonar School, Key West, plus the Fleet Sonar School, San Diego, will fall a large part of the responsibility for training men not only in the operation of these new systems, but also in their repair and maintenance, just as it does today with our present equipment.

Graduates of these schools are, in effect, expert electronics technicians, ready for duty in the modern Navy. The complex and expensive electronics systems used in antisubmarine warfare are, in the ultimate sense, as effective as the men who operate them. This points out the underlying importance of the Fleet Sonar Schools.

Notices

No. 1440 (27 January)—Established the procedures for changes in rating resulting from modification of the Enlisted Rating Structure.

No. 1740 (5 February)—Provided information concerning Federal Employees' Compensation Act coverage for disability and death as applicable to members of the Naval Reserve Officers' Training Corps and their survivors.

No. 4651 (5 February)—Announced Change No. 2 to BuPers Inst. 4651.1, which is concerned with dislocation allowance.

No. 1210 (7 February)—Invited applications from certain permanently commissioned line officers of the Regular Navy for transfer to the Civil Engineer Corps.

No. 1743 (7 February)—Announced the Jewish Feast of the Passover in 1958.

No. 1500 (11 February)—Announced Change No. 1 to BuPers Inst. 1500.25D which concerns convening dates for classes at training activities and certain schools of other services under the management of the Chief of Naval Personnel for the calendar year 1958.

No. 1440 (18 February)—Established the procedures for changes in rating resulting from modification of the Enlisted Rating Structure.

No. 1440 (7 February)—Established procedures for making changes in rating of personnel to the Photographic Intelligenceman (PT) rating for enlisted personnel on active duty.

No. 1760 (21 February)—Announced Change No. 2 to BuPers Inst. 1760.3B, which provides a state bonus summary.

No. 1650 (27 February)—Announced the availability of the National Defense Service Medal and Korean Service Medal for active duty personnel.

No. 1120 (28 February)—Announced the selection of warrant officers and USN men and women recommended for training leading to appointment in the commissioned grade of ensign in the line and Supply Corps, USN.

No. 1440 (4 March)—Announced Change No. 1 to BuPers Inst. 1440.18A, which is concerned with the program for adjustment of



the enlisted rating structure through formal school training and in-service training.

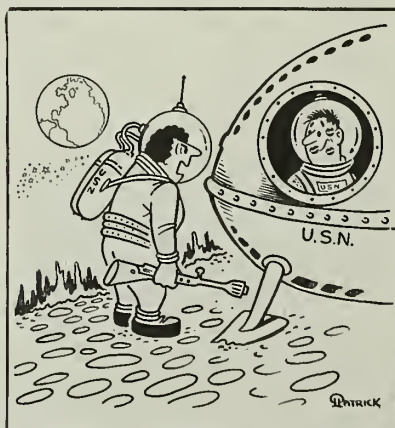
No. 1111 (5 March)—Made available the list of active duty Navy and Marine Corps enlisted personnel who have been provisionally selected for enrollment in the NROTC program.

No. 1440 (6 March)—Established procedures for making changes in rating in the AM and PR ratings to conform with modification of the enlisted rating structure.

No. 1306 (10 March)—Announced Change No. 1 to BuPers Inst. 1306.62A, which is concerned with the sea/shore rotation of enlisted personnel.

No. 1540 (17 March)—Announced Change No. 1 to BuPers Inst. 1540.2C, which is concerned with the assignment of enlisted personnel to submarine training and duty and return of qualified submariners to submarine duty.

No. 3590 (17 March)—Established procedures for the conduct of



"Where on earth have you been?"

district, type, Fleet and U. S. Navy rifle and pistol competition in 1958.

No. 1120 (28 March)—Announced selection of applicants for temporary appointment to the grade of ensign, USN, for limited duty officer, and warrant officer, W-I.

No. 1430 (28 March)—Listed the bibliography to be used in preparing for advancement in the Photographic Intelligenceman rating.

Information on Dividends For NSLI Policy Holders

The letter in front of your GI insurance policy will give you a hint as to whether you are among those who will share in the \$262 million annual dividends for 1958.

About five million holders of National Service Life Insurance (WW II) policies with the letter "V" before their policy number, and 300,000 holders of U.S. Government Life Insurance (WW I) policies with the letter "K" in front of their policy number will participate in the sharing.

Holders of policies with the letters RS, RH and H, and veterans who extended their permanent plan policies as term insurance in the "V" and "K" series, will not participate.

If you are due to receive a dividend, your check will be mailed shortly after the anniversary date of the policy.

But if you have a GI policy under in-service waiver of premium payments, you will not share in the dividends. Even though your policy may be participating under ordinary conditions, you are excluded from dividends while the in-service waiver is in effect. (See Aug 1957 ALL HANDS, p. 9.)

This, however, does not apply to veterans whose participating GI insurance policy is under premium because of total and permanent disability.

If you are among those due to receive a dividend, you don't have to take these regular dividends in cash. This isn't as silly as it sounds. You may use these to guard against losing your insurance. According to the Veterans Administration, nearly 1,100,000 veterans, or more than one of every five holders of participating GI insurance, are already taking advantage of dividend options other than cash payments.

If you hold a GI policy and receive annual dividends, you may:

- Have the dividends held, with interest, as a credit to pay the premium monthly in case you fail to pay it before the end of the 31-day grace period. This is done automatically if you do not elect another option.

- Direct that your dividends be used to pay premiums ahead of time (a discount is given on premiums paid three or more months ahead).

- Request payment in cash.

Permanent plan policyholders have an additional option which is not available to term policyholders. If you are in this category, you may authorize the Veterans Administration to hold your dividends on deposit, with interest and subject to withdrawal at your request. If not withdrawn, the money, plus interest, will increase the value of your policy.

The *interest* under either the dividend deposit or the dividend credit is taxable and must be reported annually on federal income tax returns. But the dividends and all other proceeds of the policies are not taxable.

If you decide to change your GI dividend option or have any other dealings about your insurance, you should write to the new "Home Office," which has been moved from Washington, D. C., to its new address: Veterans Administration District Office, P.O. Box 8079, Philadelphia 1, Pennsylvania.

This change of address from Washington, D. C., to Philadelphia, Pa., also affects all holders of U.S. Government Life Insurance (USGLI), which originated in World War I; and, those holders of World War II or post-Korea policies of National Service Life Insurance (NSLI) who are paying premiums by allotment from either active or retired military pay, or who reside in foreign countries.

When you do write, make sure you include your full name, service number and insurance policy number. And if you have a change in your permanent home address, it's a good policy to let the Veterans Administration know about it.

If you have any questions on your National Service Life Insurance policy, see your Insurance Officer.

HOW DID IT START

Torpedoes

During the Revolutionary War, Dr. David Bushnell got the idea that an explosive in the water, beside the target's hull, would do more damage than the same explosion above the water line. To test his idea, he made up a number of powder kegs, and launched them in the Delaware River to float down on the British fleet. But he guessed wrong about the tide and his powder kegs did no damage. Bushnell also invented a primitive, hand-powered submarine. Using this sub, he tried to fasten a mass of explosives to the hull of a British ship blockading New York harbor. This experiment was also a failure.

Bushnell amused a lot of people. Outside of that, he didn't accomplish much. But, believe it or not, Bushnell's floating powder keg is the ancestor of the modern torpedo.

Torpedoes as we know them today are self-propelled underwater weapons that carry a high-explosive charge. The destructive effect of a torpedo is greater than that of the biggest guns on a battleship. There is more high explosive in a torpedo warhead than there is in any projectile. The torpedo is the only underwater weapon equipped with a power plant capable of delivering its warhead to an enemy ship. (There are some special advanced under-seas weapons that have the characteristics of a mine as well as those of a torpedo.)

The first self-propelled torpedo wasn't developed until the Civil War. But the "torpedoes" damned by Admiral Farragut were not self-propelled weapons. They were anchored in the bottom of Mobile Bay and, according to today's terminology, they would be called "mines."

Credit for the first self-propelled torpedo goes to Captain Lupius of the Austrian Navy. Not having the mechanical know-how to build the torpedo, Lupius, in 1864, took his plans to Robert Whitehead, a British engineer. After two years of work, Whitehead produced a short torpedo, 14 inches in diameter, with 18 pounds of dynamite in its warhead. It was powered by a piston engine operating on compressed air. Whitehead's first torpedo ran at six knots, for about 100 yards. Sometimes it ran along the surface, at other times it dived to the bottom.

Whitehead worked steadily to improve his torpedo, and during the next 25 years he made one improvement after another. His 1889-model carried a main charge of 200 pounds of guncotton. Its range was 1000 yards and its speed averaged 28 to 29 knots. During his 25 years of work, Whitehead invented many of the devices

you'll find in modern torpedoes today.

Our present-day torpedoes, however, are much more versatile than any Whitehead ever dreamed of. Most of them have electronic controls and are propelled by an electric motor and a storage battery. Some have gas-turbine motors which use air-steam to propel them, while others use chemicals.

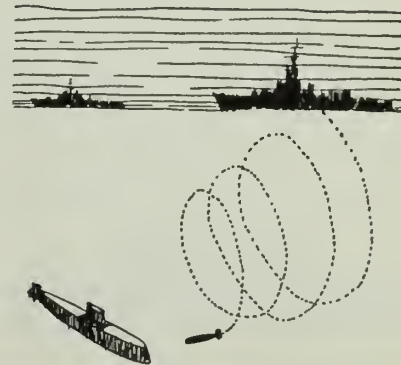
The unclassified air-steam types have speeds of from 30 to 45 knots with a maximum range extending to 7½ miles. Compared with them, the electric torpedoes have a low speed and limited range. But for use by submarines, the electric torpedo has a big advantage that makes up for its limited 30-knot speed and 4000-yard range—it leaves practically no tell-tale wake.

A great many of today's operational torpedoes are designed to kill subs. Like all other ordnance devices, torpedoes are designated by Mark and Mod. The Mk number indicates the type, the Mod number the changes or modifications to that type.

Two of the latest homing torpedoes used for tracking down and sinking subs are the Mk 43, an aerial torpedo which has been in operation for several years now, and the Mark 37. One of the most significant features of the Mk 37 is its ability to ignore many types of countermeasures.

A homing torpedo guides itself toward its target. Passive acoustic torpedoes "listen" for sounds made by the target ship, and steer themselves toward those sounds. Active acoustic torpedoes send out pulses of sound, listen for echoes from the target ship, and steer themselves toward the echoes.

As the result of an extensive torpedo research and development program, improved weapons with longer running ranges, increased target-acquisition range, greater operating depths and higher speeds are joining the Fleet.



DECORATIONS & CITATIONS

DISTINGUISHED SERVICE MEDAL

"For exceptionally meritorious service to the Government of the United States in a duty of great responsibility . . ."

★ CURTS, Maurice E., ADM, USN, as Deputy Commander in Chief U. S. Pacific Fleet from 16 Jun 1955 to 1 Feb 1958. During this time Admiral Curts, serving in a position of major responsibility, maintained the Pacific Fleet and its supporting elements at peak of readiness, as demonstrated during the Suez crisis in November 1956 and many other occasions.

★ INGERSOLL, Stuart H., VADM, USN, as Commander Seventh Fleet and Commander United States-Taiwan Defense Command from December 1955 to June 1957. Under his leadership the Seventh Fleet was maintained at a high state of combat readiness as a stabilizing element in the Far East. As Commander United States-Taiwan Defense Command, Vice Admiral Ingersoll was directly responsible for carrying out United States policy in cooperation with the Chinese nationalist government in the defense of Taiwan.

★ PHILLIPS, William K., ADM, USN (Ret.), as Commander First Fleet from February 1954 to August 1955 during which time units of the First Fleet were brought to a high state of combat readiness. Admiral (then RADM) Phillips was cited for his contributions to the stabilization of the troubled Indo-Chinese area.

Gold Star in lieu of fourth award

★ RADFORD, Arthur W., ADM, USN, as Chairman of the Joint Chiefs of Staff from 15 August 1953 to 15 August 1957. Admiral Radford's "sound judgments and decisions were of national and international significance. His keen thinking and considered military advice to the President, the National Security Council and the Secretary of Defense had great influence on the military posture of our country and our allies."

BRONZE STAR MEDAL

"For exceptionally meritorious conduct in the performance of outstanding service to the Government of the United States . . ."

★ RYCHLY, Vladimir L., CDR, USNR, for exceptionally meritorious conduct while serving with the United States Naval Forces, Germany, from 1946 to 1957. Commander Rychly achieved a marked degree of success in carrying out extremely important and arduous assignments during that period.

★ SHILLING, Katherine E., CDR, USN, for exceptionally meritorious conduct from September 1950 to May 1955 during which time she served in the office of the Judge Advocate General, Department of the Navy, Washington, D.C., in one of the most comprehensive legislative projects ever undertaken by the Department of Defense. Commander Shilling performed extensive research of existing federal statutes affecting the Navy and carried out the task of drafting the Navy's portion of the codification of Title 10 of the United States Code.

Gold Star in lieu of second award:

★ HOLTWICK, Jack S., Jr., CAPT, USN, for carrying out important duties in the Communications Intelligence Field, from January to April 1950, January 1951 to January 1952, and October 1953 to June 1957. Captain Holtwick has made continuing contributions toward the security of the nation.

★ WRIGHT, Wesley A., CAPT, USN, while assigned to the National Security Agency from February 1952 to June 1957. Captain Wright has contributed toward the security of the nation by his notable work in the Communications Intelligence Field.

NAVY AND MARINE CORPS MEDAL

"For heroic conduct not involving actual conflict with an enemy . . ."

★ BECKHAUS, Lawrence W., GM2, USN, for heroic conduct in rescuing a fellow serviceman from drowning in North Atlantic waters while serving on board the *uss Salamonie* (AO 26) on 12 Dec 1957. When a crew member from another vessel was reported overboard in the course of refueling operations during a violent storm, Beckhaus

volunteered to go over the side in a rescue attempt. Wearing a harness with a line attached, he dived into the extremely high seas, and swam against waves estimated at 40 to 60 feet high and succeeded in reaching the victim whom he brought back to the side of the ship where both were hauled to safety.

★ BURCHFIELD, Leonard W., AN, USN, for heroism in rescuing the driver of a gasoline refueler whose clothing became ignited when his vehicle burst into flames at the United States Naval Air Station, Cubi Point, Philippine Islands, on 16 May 1957.

★ HYDER, Bobby E., BT3, USN, (Awarded posthumously) for heroic conduct while serving on board the *uss Franklin D. Roosevelt* (CVA 42). On 19 Jun 1957, an explosion, which caused nine major engineering spaces to be flooded with live steam, took place in the No. 1 pump room. Hyder, serving as boiler tender in charge of the adjacent 1C boiler room, directed his crew to evacuate the space while he remained behind to secure the boiler. After completing his task, Hyder was able to climb the ladder on the second deck before collapsing from asphyxiation and fatal burns from the steam.

★ PENSINGER, Frederick D., Jr., FA, USN, for heroism in rescuing a fellow serviceman from drowning in San Diego Bay, California. On 2 Apr 1957, seeing two men fall overboard from a water taxi, Pensinger jumped into the icy current and swam to the aid of one of the drowning men. With another rescuer's assistance, he managed to bring the victim to the safety of the vessel.

★ POCHORDO, Stanley, AD1, USN, for heroism in preventing more serious burns or possible death to a driver of a gasoline truck and for saving one or more aircraft parked nearby from destruction or serious damage. On 16 May 1956, while serving with Heavy Attack Squadron Nine at Port Lyautcy, Morocco, Pochordo extinguished with his body and bare hands the flaming clothing of the victim after an explosion and fire occurred in his truck. He then returned to the scene of the fire and fought the flame until it was subdued.

BOOKS

SALTY READING FOUND IN THIS MONTH'S SELECTION

EVEN THE FICTION SELECTED this month by the Library Services Branch has a salty tang. You'll find the titles described below, and many others, in your ship and station library.

Pocket Battleship, *The Story of the Admiral Scheer*, by Admiral Theodor Kranke and H. J. Brennecke, is naval history in its most palatable form. *Scheer* was a World War II German raider that became a British nightmare. She was a battleship which had broken through into the North Atlantic and had fallen upon the then lightly defended convoys upon which England depended. She sank more than 150,000 tons of Allied shipping and, in one action, she caused the end of the auxiliary cruiser *Jervis Bay*. With almost her entire hull ablaze, *Jervis Bay* went down with her guns firing in her effort to hold off the raider long enough to give her convoy time to disperse. *Scheer* continued her successful career from the arctic to the tropics but was finally sunk in Kiel Harbor. Very readable, and told by two officers who commanded her.

Escape of the Amethyst by C. E. Lucas Phillips is another story of an individual ship but the viewpoint is considerably different. HMS *Amethyst* was the small British frigate which, while on a peaceful mission up the Yangtze River, was fired upon and almost sunk by a Chinese communist battery before she could fire a gun. This is the story of what happened after that event. The little ship, with a very young crew at half strength, was held captive for months, constantly threatened with destruction by strong enemy forces only a few hundred yards away. When rescue attempts and diplomatic protests brought no results, the crew resolved the problem by making a sensational escape down the river.

Strategy and Compromise, by Samuel Eliot Morison, attempts to present the reasons why the Allies followed the course of action they did during World War II. The material in Morison's relatively brief book logically falls into two parts—the war in Europe and the war in the Pacific. As he sees it, the United States' contribution to the strategy

of the European theater was largely compromise. The decision to beat Hitler first was never disputed, but Pearl Harbor made it necessary for us to deflect material originally intended for Europe. As a result, disagreements and compromise were the pattern of strategic planning for the African campaign, the Italian campaign, the invasion of France and that of Southern France.

On a somewhat more personal level, we have **Nature Is Your Guide**, by Harold Gatty. The book's subtitle, "How to Find Your Way Without Map or Compass on Land or Sea," gives you a pretty good idea of its content and approach. It is a book for all those whose vocations or avocations bring them into contact with the world of nature. A practical book on pathfinding by natural methods, both on land and

at sea, it brings together a wealth of little known lore and information gathered from all over the globe and, for the most part, given in no other book. "Directions from Waves and Swells," "The Color of the Sea," and "The Habits of Sea Birds" are chapters of interest to Navymen.

Once Around the Sun, by Ronald Fraser, may not have as close a personal relationship, but those who like to permit their imagination to run loose will find it of great interest. It tells why an 18-month period was set aside for the International Geophysical Year and what we hope to learn through the coordinated efforts of scientists from 64 countries of the world. Highlighting the importance of the sun in the study of geophysics, Dr. Fraser covers all phases of the sun's behavior and its various effects on the earth. Covering IGY in detail, the author discusses the 24-hour watch on the sun, the oceanographic program, the concentration of stations from pole to pole and describes in detail the rocket and satellite programs.

Two fiction choices may be cited. **The Winthrop Woman**, by Anya Seton, makes the years of the founding of New England come alive. Though told as a novel it is history in its most palatable form. All the key people are here, with their passions and fears, their ambitions, defeats and aspirations. We learn that their English backgrounds played an important part in their New England struggles—in their intolerances, conflicts, and battle for power. The story conveys the whole panorama of the early years.

The Lady and the Deep Blue Sea, by Garland Roark, is a regular blood and thunder sea story. Captain Broadwater was known for his melodramatic entry into port—always all sails full until the very last minute. The owner of his line, Mr. Cartwright, takes a dim view of such nonsense. Was Broadwater just lucky, he wanted to know, or was he capable of putting sound judgment ahead of drama? The answer is to be determined during a race from Melbourne to Boston against the Captain's old rival, and with a heavy wager on the side. This is the story of the outbound voyage, when the Captain's wife discovers that his greatest fear is that of failure, and of the return race. The high spot is, of course, the chance that almost cost the Captain his ship.

NOW HERE'S THIS

Heat the Ice Cream, Men

Now that spring is about here, quite a few Navy families in temperate climates are planning their first picnics of the 1958 season. However, for Navymen returning to the States after wintering over at the South Pole Station, the '58 picnic season got under way a long time ago.

In fact, it started on New Year's Day. And, since all time zones converge at the Pole, the personnel stationed there were among the first people in the world to celebrate the New Year. To mark the occasion, they roasted hot dogs over an open fire and held a typical American picnic.

Well, almost typical anyway—the temperature was 20 degrees below zero, so, before the ice cream could be eaten, it had to be warmed over the fire along with the hot dogs.



The Great White Fleet

Shortly after the turn of the twentieth century, the U. S. Navy's round-the-world good will tour became headline news in the press of all nations

HALF A CENTURY AGO (it was at 1000 exactly, 16 Dec. 1907) the order "Get underway" was flashed from the flagship and 16 gleaming white battleships turned on their heels in Hampton Roads and steamed toward the Atlantic Ocean and a voyage that would last 14 months and carry the "Great White Fleet" around the world.

Each ship swung into line behind *uss Connecticut*, flagship for RADM Robley D. Evans, USN, commander-in-chief of the force. Leading the column was the Presidential yacht *Mayflower*. As she turned northward and swung her bow toward the passing Fleet, President

Virginia, Minnesota, Ohio, Missouri, Maine, Alabama, Illinois, Kearsarge and Kentucky.

WHEN THE PRESIDENT arrived in Hampton Roads aboard his yacht early that morning he witnessed the stirring sight of the "Great White Fleet" dressing ship and listened to the deafening roar of their guns as the Battle Fleet greeted him with a salute. RADM Evans came to the yacht to call on the President and was joined later by the commanding officers of the ships of the Battle Fleet. But in the midst of all the captains, commodores and admirals the President sent



UNDERWAY—U. S. Great White Fleet steams out to sea in formation during 1907-09 around-the-world cruise.

Theodore Roosevelt signaled the Fleet a wish for a happy voyage. In return each ship blasted out the Presidential salute, the colors were dipped and the Star Spangled Banner played.

The announced purpose of the cruise was to weld the battle force into a coordinated unit. Nothing could do this better than an extended cruise at sea and, as a secondary objective, the cruise to San Francisco would prove to observers that the United States could effectively shift its Navy from the Atlantic to the Pacific.

Never before had such a force of warships attempted to steam around the world as a unit. This accomplishment would not only prove that the United States could put a big Fleet in the Pacific, but would also emphasize that we were a great naval power.

The 16 mighty ships steaming before him were the nation's big stick. Behind *Connecticut* came *uss Kansas*, Vermont, Louisiana, Georgia, New Jersey, Rhode Island,

for the coxswain of *uss Louisiana's* captain's gig.

The President asked the young sailor to remember him to the crew of *Louisiana*, in which he had earlier sailed to Panama. As the sailor left, the President remarked to the assembled senior officers: "I tell you our enlisted men are everything! They are up to everything required of them. This is indeed a great Fleet and a great day."

As the Battle Fleet steamed past Cape Henry and turned south for the equator the ships formed four columns abreast and began cruising at 10 knots. Off to the starboard of the flagship was the tender *Yankton* which was to be used as the admiral's yacht in port and for short journeys. The last wireless messages (the battleships were equipped with experimental wireless gear) were passed to shore installations and then the force was steaming alone.

Late on the first day of steaming Admiral Evans sent



HOME AGAIN—President Theodore Roosevelt greets returning Navymen from gun mount on board USS Connecticut.

word to the 14,000 officers and men of the Fleet that after a short stay on the Pacific Coast it was the President's intention to have the Fleet return to the Atlantic by way of the Mediterranean. This became general knowledge to the world the next day and various countries tendered invitations to have the Fleet visit their ports.

THE FIRST PORT of call was to be Port of Spain, Trinidad, but before the Fleet arrived two of the battleships were sent off on mercy missions to carry sick sailors to shore-based medical installations. *Missouri* steamed for San Juan and later on the night of 20 December *Illinois* was dispatched to Culebra. Both ships rejoined the force several days later.

On 23 December the force of battleships steamed into Port of Spain where the ships of the supply train were waiting. As the column entered the harbor, the first four ships simultaneously turned 90 degrees with such precision a tape could have been drawn across their bows. As the next four ships arrived on the still boiling wakes of the lead vessels they executed the same

maneuver and so on until the entire force was steaming across the bay in a square formation, four ships wide and four deep.

Soon after dropping anchor the Battle Fleet began the tedious business of taking on the coal that would drive the ships the 3000 miles to Rio de Janeiro, Brazil.

The colliers slipped alongside the beautiful white ships, all hands turned to, and the black dust began to fly.

Down in the holds of the collier four sections of men from the battleship filled each coaling bag with 800 pounds of the solid fuel. Then it was carried aloft and swung over to the battleship by a whip and set down on deck. Some bags were hand-trucked to chutes on the side away from the collier while other bags were dumped as soon as they landed, into chutes leading to the bunkers. It was backbreaking work for all hands, especially those down in the fireroom bunkers. All ventilators and hull openings had been closed to keep the dust from penetrating into the interior of the ship.

Uniform for the operation was as varied as the jobs assigned. Some men wore discarded Marine helmets

FLAGS FLY—Navymen of the White Fleet are welcomed as first liberty party parades in Yokohama street.





BIG DITCH—White battlewagons pass through Suez Canal while en route from Suez to Port Said.

while others tied bright handkerchiefs around their heads. All wore whites (they were originally white) which they had saved for the coal-loading chore. As soon as the last bag was dumped the crew cleaned the ship and themselves.

IT TOOK FOUR DAYS to complete the coaling of the Fleet. The last ship to take on coal was *Maine* which had the biggest appetite for the lumpy fuel. She was going to need every bit of reserve fuel she could carry for the run to Rio de Janeiro. After each ship completed 'refueling' they took on fresh meat and other foods from the "beef" or supply ships.

By that time the Fleet had celebrated Christmas with a turkey dinner complete with sage dressing and cranberry sauce. On Christmas day the six-vessel torpedo boat flotilla, which had left the U.S. two weeks before the Battle Fleet, sailed for Rio followed two days later by *Yankton* and the repair ship *uss Panther*. The supply ships *Culgoa* and *Glacier* steamed with the Fleet on 29 December.

On 6 January 1908 the battleships steamed across the equator and more than 12,000 crew members were introduced into the Royal Domain of Neptune Rex.

Six days later the Fleet sailed into Rio de Janeiro where, at mail call, each ship received about 20 bags of mail. After six days of liberty and social calls they left the South American port to the accompaniment of thunderous rounds of salutes fired by the American Fleet and answered by the Brazilian force which escorted the White Squadron to sea.

From Rio, the course led southward to Cape Horn and the Strait of Magellan. En route to the Cape, the Fleet was met by a squadron of the Argentine Navy which had traveled hundreds of miles to meet the Yankees and, again, to offer a salute. The Argentine sailors manned the rails as the U. S. ships fired 21-gun salutes and played the Argentine National Anthem. They were answered by the saluting batteries, and the two Fleets parted company.

A stop at Punta Arenas, Chile, was made before passage through the famed, and dreaded, Strait. After taking on coal the force of 16 white battleships moved into the Strait, led by a Chilean cruiser. Many U. S. commentators of the time viewed with alarm the terrible risk of sending the Fleet through the storm-tossed Strait. They cited the fate of the 52 vessels most recently lost. Of these, 26 had names beginning with the letter

"C" and wasn't this Fleet, they pointed out, led by *Connecticut* and the Chilean cruiser *Chacabuco*?

Fog blinded the force at times, the tide tossed the heavy battleships like corks and the wind whistled through the rigging—but the U. S. Navy came through without mishap.

NEXT STOP WAS CALLAO, Peru, where the word "welcome" was spelled out on a mountain side by white-clad naval cadets. Then the Fleet went on to Magdalena Bay located on the southern end of the Mexican peninsula of Baja California, for a month of target practice. It was a busy month with giant targets being sewed, painted and hung on log rafts. During the month each ship steamed about 100 miles making 35 to 40 firing runs on the targets in competition with the others—and, unknowingly, against the navies of the world.

From the target area the ships steamed to San Diego, San Pedro, Santa Barbara, Monterey, Santa Cruz and finally San Francisco where the Atlantic Fleet made a grand entrance through the Golden Gate on 6 May to join forces with the Pacific Fleet. Thousands watched the Fleet steam into the Bay after 61 days, 19 hours of actual cruising. A giant celebration was held in honor of the event. Later the "Great White Fleet" steamed to Puget Sound for a visit and then returned to San Francisco.

Now that President Roosevelt had demonstrated for all the world to see that the U. S. Atlantic Fleet could be shifted rapidly into the Pacific, it was time for the Battle Fleet to continue its unprecedented voyage around the world.

RADM Charles S. Sperry, USN, had assumed command of the force in San Francisco after illness suffered at Magdalena Bay had forced RADM Evans to request relief. The battleships *Alabama* and *Maine* had been ordered to sail for home in advance of the Battle Fleet via Manila and the Suez Canal. *Wisconsin* and *Nebraska* took their place in the formation when it sailed on 7 Jul 1908 and the force of torpedo boats was left behind.

NINE DAYS OF STEAMING put the White Squadron in the Hawaiian Islands for a short visit to Honolulu and then they turned toward Auckland, New Zealand. The welcome given to the American warships in New Zealand was among the most tremendous received on the entire voyage. The Maori natives were assembled in great crowds to pay homage to the visiting warriors of the sea.

Next on the agenda were week-long visits to Sydney and Melbourne, Australia.

The force steamed to Albany in Western Australia before turning north to the Philippines and a visit to Manila. The Fleet steamed into Manila Bay on 2 October and stayed for eight days, but there was no visiting. Manila had just experienced a cholera epidemic.

The worst weather of the voyage was encountered on the trip between the Philippines and Tokyo, Japan, the next port of call. The Fleet was forced to slow down, with one division being ordered to go off by itself and make as easy weather as possible. *Kearsarge* had her foretopmast carried away, and with it went the wireless antenna. Three men were lost overboard from other ships, but two were rescued in a thrilling fashion and the Battle Fleet steamed into Tokyo Bay one day late

after having proved that the Atlantic Fleet was much more than a fair weather Fleet.

THREE JAPANESE WARSHIPS escorted Admiral Sperry and his force to the double-line anchorage. As the 16 American ships moved to anchorage they passed an equal number of Japanese warships that would serve as host vessels during the visit. The air was alive with the sounds of cheering Japanese sailors and exploding fireworks.

Nearly every Japanese family had a lantern bearing the crossed flags of the two nations and every street and alley in Tokyo was decorated with them and with colorful bunting. When the visit ended the Fleet sailed away with each man loaded down with souvenirs, gifts and fond memories.

Half the battleships next went to Amoy, China, for a visit while the other half steamed to Manila to conduct battle practice. An enormous playground community was built for the entertainment of the officers and men of the Fleet owing to the danger of an epidemic existing in Amoy, and all the food and drink served were brought from Shanghai, along with horses and carriages, rickshas and mandarin chairs.

After leaving China the second squadron, with the exception of *Louisiana*, headed for Manila Bay to join the first squadron in battle practice. *Louisiana* made a short visit to Hong Kong and then rejoined the Fleet in maneuvers. For nearly a month the Fleet carried out firing exercises that proved the Navymen had learned much from their cruise and that they had become a well rounded fighting team.

THE ROUTINE THAT MOLDED the sailors into this fighting team began daily at 0500 with the sounding of reveille. Between then and 0715 when breakfast was served to "Jack," (the popular name applied to sailors in the early 20th Century) he would have triced up clothes lines, possibly have taken his place as a mast-head lookout or helped to break up and burn all boxes and articles that would float. His hammock would have been secured and he may have taken his place in a working party hoisting ashes. At 0815 Jack might be helping clean one of the guns, polishing bright work or working in his rating.

At 1100 ashes were hoisted out of the fireroom again and at 1200 dinner was served. Work began again at 1300 and ended at 1630. Supper was served at 1715 and at 1930 hammocks were rigged. In between the routine chores the bugle call for any one of the many drills might be sounded and Jack would drop what he was doing and dash for his duty station. No less than 98 different bugle calls regulated the life of Jack as he went about his daily routine on board the man-o-war.

The food served to the world-circling Navyman was the best possible. For breakfast on Sunday he had baked pork and beans, catsup, bread and butter and coffee. Other days he might have had corn meal mush, milk and fried pork sausage or fried pork chops, onion gravy and potatoes. Dinner could have consisted of tomato soup, boiled ham and potatoes or roast beef and brown gravy. The evening meal might consist of cold corned beef and fried potatoes or frankfurters and hot slaw.

DURING THE SECOND VISIT to Manila the bluejackets went ashore for liberty before sailing for Colombo,

MAY 1958



SUNNY SIDE—Officer on board flagship *USS Connecticut* is shown getting a meridian at sea.

Ceylon, for a week's visit and then on to the Suez Canal. Christmas, 1908, was celebrated in the area between the Indian Ocean and the Arabian Sea. Palms were used to decorate the ships along with fruit, colored streamers and coconuts. On deck sports were held including the famous sack races, three-legged races, potato races, shoe races and the bobbing contest.

In the bobbing event the contestants first stuck their heads into a tub of water to pick up an orange with their teeth, then dashed over to another tub which presumably contained six inches of flour covering eight silver dollars that would go to the man who could pick them up with his teeth. Many a cheer came from the assembled crew when a contestant having learned that beneath the flour was a three inch layer of molasses covering the silver dollars, nevertheless continued after the prize.

The last ship cleared the Suez Canal on 7 Jan 1909 and was moored safe in the artificial harbor at Port

THEY'RE OFF AND ROWING—Men of cruise take time for fun with boat race in Mexican waters.



Said, Egypt. The battleships came through the canal in groups 24 hours apart and it cost Uncle Sam about \$130,000 to bring the Fleet and the four auxiliaries through the canal. No Navymen were allowed to go ashore in Port Said, but 1600 were taken to Cairo for a two-day visit.

THE NEWS OF A SEVERE EARTHQUAKE at Messina, Italy, reached the Atlantic Fleet when it arrived at Suez on 3 January. The Navy Department diverted food supplies intended for the Fleet to Messina, and RADM Sperry steamed toward the stricken town in his flagship *Connecticut* accompanied by *Illinois*. The flagship re-

joined the other ships of the division in Naples where King Victor Emanuel thanked the Fleet for the aid that they had furnished to his stricken people.

Nine other Mediterranean ports were visited by various battleships before they assembled at Gibraltar for the voyage back home. After a six-day visit to the rock that guards the entrance to the Mediterranean the "Great White Fleet" turned toward home.

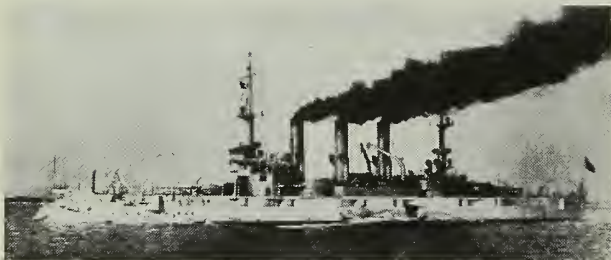
More than 1000 miles off the East Coast the entire Home Squadron consisting of the battleships *Maine*, *Idaho*, *Mississippi* and *New Hampshire*, two armored cruisers and three scouts met the returning force.

This Fleet anchored off the entrance to Hampton

FIRST DIVISION



USS Connecticut



USS Kansas



USS Minnesota

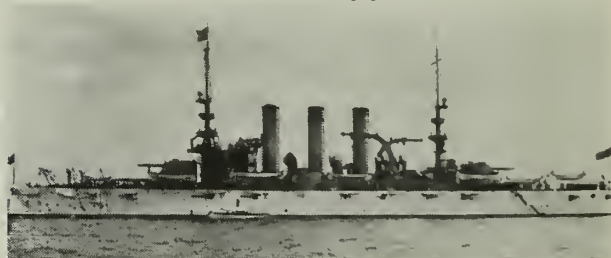


USS Vermont

(Below) USS Glacier



SECOND DIVISION



USS Georgia



USS Nebraska



USS New Jersey



USS Rhode Island

(Below) USS Alabama (Replaced by USS Wisconsin)



Roads at 0200, 22 Feb 1909 and at 0900 they passed through the Capes to be reviewed by the President.

THUS ENDED THE CRUISE of the Great White Fleet. The Battle Fleet had been gone 434 days and had covered some 46,000 miles. Their average speed had been about 10 knots, but had climbed as high as 13 and fallen below eight. Greetings had been exchanged with warships representing 14 countries and four heads of state had reviewed the force.

The 16 battleships had returned home in as good shape as when they left and in a far better state of readiness. They had proved the self-maintenance ability contained in the Fleet along with the ability to steam

through rough weather—and the gunnery practice had demonstrated their battle efficiency. New standards of economy in coal consumption had been set, the radius of action of the Fleet extended and the weakness of the supply train was demonstrated.

But most of all, the "Great White Fleet" showed the Navy to be a silent but nonetheless efficient aid to diplomacy, earning the friendship of many nations and the respect of those which recognize only force. The Navy's role in diplomacy and power-for-peace has been demonstrated time after time since the world cruise of the U. S. Atlantic Fleet, 1907-1909.

—William Prosser, JOC, USN

THIRD DIVISION



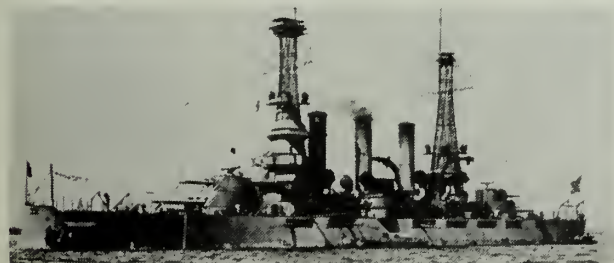
USS Louisiana



USS Missouri



USS Ohio



USS Virginia

(Below) USS Maine (Replaced by USS Nebraska)



FOURTH DIVISION



USS Wisconsin



USS Illinois



USS Kearsage



USS Kentucky

(Below) USS Culgoa



TAFFRAIL TALK

INCLUDED in a recent Department of Defense selection of outstanding examples of military journalism were three Navy ship and station papers—*The Gator*, Amphibious Force, Norfolk, Va.; *Patrol*, Sub Base, Pearl Harbor; and *Sanfly*, Sanford NAS, Fla. By what we like to consider a not-so-strange coincidence, ALL HANDS alumni have worked on two of them. Bill Miller, JOC, squared the *Gator* away at one period during his career, and ENS Rudy Garcia (then JO1) helped keep *Patrol* afloat at Pearl.

Don't get us wrong. We're not bragging. Just citing facts.

★ ★ ★

In the preceding pages of this issue we've had occasion to cite a number of instances in which Navymen have made friends all over the world. We've been trying to get the idea across in our limited, bumbling way that naval personnel are, first of all, real human beings who happen to be members of the U. S. Navy. Most of them are pretty nice fellows and some are better than others.

We hope that the following quote from a newspaper clipping with a South Carolina dateline, sent us by our friend LCDR W. Y. Hazlehurst, CEC, USNR, will help us make our point:

"Three unidentified sailors have been credited with rescuing three children from a fire which burned to death two other children.

"The sailors driving on U. S. 301 saw the flames and heard the cries of the children. They rushed into the flaming house and rescued Ann, 7; Jack Lynn, 5; and Larry 1. The sailors then left without leaving their names.

"Police said the parents were not at home."

Comments LCDR Hazlehurst: "I feel sure that actions such as this far outnumber the misdeeds of service personnel but are passed unnoticed, whereas misbehavior is often blazoned in headlines."

Do we get the idea across?

★ ★ ★

Some of our newly fledged SRs, SAs and SNs (not to mention ensigns) may have their own private doubts that anyone as



exalted as a real U. S. Navy captain can also be human but we are in a position to assure them that many of them are. Consider, for example, CAPT W. E. Rawie, USN, who happens to be Head of Enlisted Advancements Section in the Bureau. He's been around quite a bit and, during a long and active career has collected a number of awards, certificates and commendations. One of his proudest possessions, however, is a recent Cub Scout certificate of appreciation for his services as "Den Mother."

The All Hands Staff

The United States Navy

Guardian of Our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS the Bureau of Naval Personnel Information Bulletin, with approval of the Bureau of the Budget on 23 June 1955, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directives is for information and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given ALL HANDS. Original articles of general interest may be forwarded to the Editor.

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The Bureau invites requests for additional copies as necessary to comply with the basic directive. This magazine is intended for all hands and commanding officers should take necessary steps to make it available accordingly.

The Bureau should be kept informed of changes in the number of copies required.

The Bureau should also be advised if the full number of copies is not received regularly.

Normally copies for Navy activities are distributed only to those on the Standard Navy Distribution List in the expectation that such activities will make further distribution as necessary; where special circumstances warrant sending direct to sub-activities the Bureau should be informed.

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● AT RIGHT: LIBERTY CALL—Down the ladder and into the boat go the men of USS Norton Sound (AVM 1) to another foreign port of call. Destination: Acapulco, Mexico.





TURN TO

SAVE
manpower
time
money

NAVY'S
"OPERATION DOLLAR STRETCH"

ALL HANDS

D 208.3: 197

121

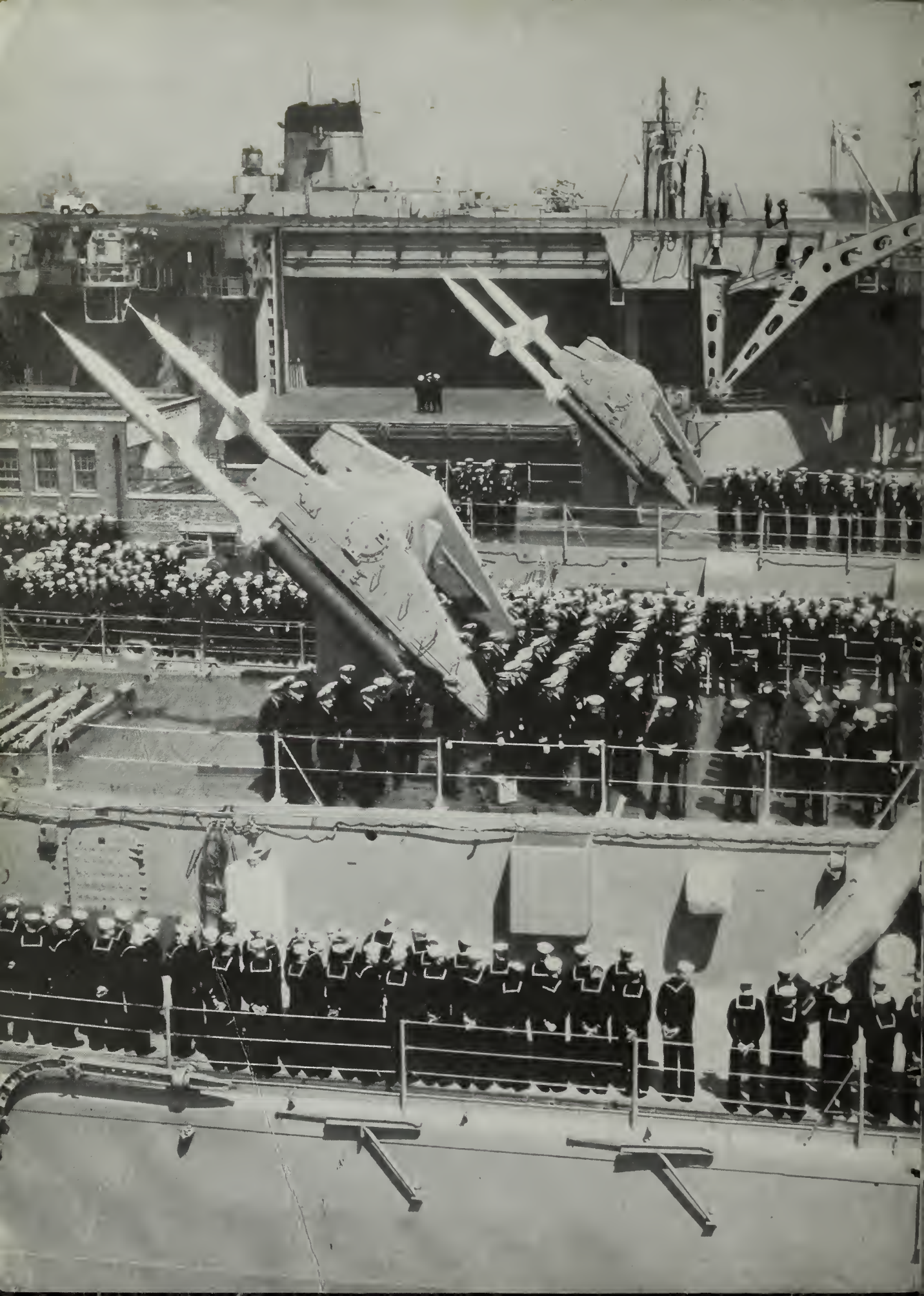


This magazine is intended
for 10 readers. All should
have it as soon as possible.
COPY ALONG

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JUNE 1958



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

June 1958

Nav-Pers-O

NUMBER 497

VICE ADMIRAL H. P. SMITH, USN
The Chief of Naval Personnel

REAR ADMIRAL J. R. LEE, USN
The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdell, News

David Rosenberg, Art

Elsa Arthur, Research

French Crawford Smith, Reserve

Don Addor, Layout

• **FRONT COVER: ON DECK**—Destroyermen of USS Soley (DD 707) muster for ceremonies at Norfolk at end of four-month cruise in Med. Twenty-eight received Good Conduct medals and nine were advanced to seaman. Here, Captain O.D. Waters, Commander Destroyer Squadron Two, presents Marvin Sizemore, BMC, with his fifth Good Conduct medal.

• **AT LEFT: MISSILE MEN MUSTER**—Crew members of guided missile cruisers USS Boston (CAG 1) and USS Canberra (CAG 2) stand at ease while waiting for change of command ceremonies to begin. The Terrier-packing cruisers were at Norfolk.



2158 A.D. — VANGUARD

IF BENJAMIN FRANKLIN—whose science was most modern for his day—had put Vanguard I into orbit instead of flying his historic kite, it would still be circling the earth, and today Navy scientists might be speculating on when it would return to earth.

On the basis of early performance, the Navy's Vanguard I test satellite had been dubbed "a very long-lived moon." At first the most optimistic prediction had been that it would stay up for as long as 20 years and that one of its radios might still be sending out signals as many as 10 years from now.

However, on the basis of new calculations, Dr. John P. Hagen, Director of Project Vanguard, now predicts that the Vanguard I test satellite will stay in orbit 200 years—"and probably circle the earth over the heads of your grandchildren and even their grandchildren."

At present Vanguard I is speeding around the earth—which it circles once every 133 minutes—at more than 18,000 miles per hour. On the basis of these figures, in 200 years Vanguard I would have made more than 790,912 orbits around the earth—a distance of about 31,557,402,684 miles. That's quite a stretch. It represents almost 170 round trips to the sun or more than 66,130 round trips to the moon. The sun is 93,003,000

miles from earth, while the moon's average distance is 238,587 miles away.

Getting back to earth, Vanguard I's travels over a 200-year period would amount to over 5,224,735 round trips from New York to San Francisco. That is more than 143 trips from coast to coast (3020 miles) in a single day. Vanguard I travels more than 39,900 miles in each orbit and circles the earth more than 10 times each day.

When Dr. Hagen predicted that Vanguard I will be with us for at least 200 years, he told of the extreme altitudes at which the test "moon" is orbiting. He said that in its elliptical path Vanguard I reaches an apogee (highest altitude) of 2463 miles and a perigee (lowest altitude) of 405.1 miles.

Even at heights of 200, 300 or 400 miles the earth's atmosphere still maintains a drag on satellites that causes them to lose energy and fall back to earth. Since Vanguard I's lowest altitude is 405 miles, Dr. Hagen pointed out that it will stay up for generations because it is relatively free of the earth's atmospheric drag.

Vanguard I—the forerunner of the Navy's fully instrumented scientific earth satellite—weighs only three and a quarter pounds. It's simply a test sphere. The rocket that success-

fully launched it was originally intended to soar aloft without a satellite. The firing was scheduled to be only a test of the newly developed Vanguard launching vehicle. The Navy, however, decided to include a miniature satellite in the test vehicle, "just in case" the firing was successful.

The tiny test sphere is equipped with two radio transmitters, one powered by conventional batteries, the other by solar batteries which draw their power from the sun. The Navy's fully instrumented scientific earth satellite weighs 21½ pounds. It will orbit at considerably lower altitudes than Vanguard I.

Dr. Hagen said that the fully instrumented 20-inch sphere will transmit back to earth 20 channels of information, about five times as much as is being received from the six-inch Vanguard I satellite now in orbit. In spite of its size, Dr. Hagen said, "we are getting all the information scientists hoped for from this satellite."

The 3¼-pound test sphere is accompanied in its space travels by the third stage of the mighty Vanguard rocket. Weighing more than 50 pounds, the third stage—from which the satellite was shot into its orbital flight path—is about five and one half feet long and 22 inches in diameter. By adding the weight of



IS STILL GOING STRONG

the third stage, which is still in orbit, to that of the test sphere, Vanguard I's total orbiting weight would be approximately 55 pounds.

The rocket that put Vanguard I into orbit was officially dubbed "TV-4." It was actually the sixth in a series of test vehicles which date back to December 1956. The TV-4 designation is somewhat confusing because the first test vehicle was numbered TV-0 and the fifth was TV-3-BU, a back-up vehicle for TV-3.

The first test vehicle, TV-0, was a single stage using a *Viking* rocket. It was fired on 8 Dec 1956. TV-1, fired on 1 May 1957, was a two-step rocket using a *Viking* as the first stage and a prototype of the Vanguard's third stage.

TV-2, tested on 23 Oct 1957, consisted of a prototype of the first stage of the actual Vanguard launching vehicle and second and third stage that were dummies, except for some test instrumentation. This was the first rocket to have the external configuration of the complete three-stage Vanguard satellite-launching vehicle. All three of these test firings were regarded as highly successful.

On 6 Dec 1957, in the fourth Vanguard test, Test Vehicle Three—the first to use all three stages of the Vanguard rocket—resulted in an explosion. The rocket lifted off its pad several feet, and in two seconds lost

thrust, fell over and blew up.

TV-3-BU was fired on 5 Feb 1958. After a successful lift-off and 57 seconds of flight, a connection between units of the first-stage control system failed to function and the rocket veered off course with such force that it broke apart.

After these two disappointing failures, the Navy finally succeeded in firing, for the first time, the completed three-stage Vanguard rocket, and at the same time placed the Vanguard I "long-lived" satellite into orbit.

TV 4's HISTORIC FLIGHT was made from the same launching pad at the Cape Canaveral test site where the first two three-stage Vanguard launching vehicles had failed. But this time, things were different.

The Vanguard launching crew had worked through the night on the towering bullet-shaped TV-4 as it stood patiently waiting in its red and white steel gantry. It was about 0100 on the morning of 17 March, while laboring under flood lights, that they began the final six-hour "countdown"—that precisely timed check-off of hundreds of last-minute flight preparations.

By 0610 the situation was well in hand and everything appeared shipshape. One by one the workmen gradually began sliding down the firemen-like poles of the gantry. And


before long, the giant scaffolding began to be rolled back from the 72-foot missile that had been painted bright green in honor of its St. Patrick's Day launching.

The countdown continued to progress without incident. Almost too smoothly, the Vanguard crew thought. But the critical period was still ahead.

At "T" minus 40, just 40 minutes from firing time, the workers began getting tense. The danger period was commencing. It was at this point that the mechanism for igniting the rocket's highly explosive fuel had to be installed. T-39, 38, 37 . . . precious minutes ticked by. The countdown continued without a hitch.

From a nearby meteorology station, a large white weather balloon was sent aloft for a final check on the weather and wind conditions. By now the sun was shining brightly. From all indications, the wind and weather were favorable as the countdown continued slowly but steadily.

At T-25, all personnel were ordered to leave the launching area. The technicians and other members of the Vanguard launching crew took their respective stations in the block house, or stood by and watched from remote observation points. TV-4, pointed skyward, now stood alone—waiting for the big moment.



At T-20, the tense morning stillness surrounding the launch area was broken by a blasting horn which announced that "the smoking lamp is out."

"T" minus 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7 and 6 . . . Then, the nerve-racking count was held. The time was 0706—just six minutes before the scheduled firing . . . "What's the matter?" . . . "So near, yet so far!" . . . "Trouble?" "Will the firing be delayed?" . . . "Does the countdown have to start all over again?" Questions, questions and more questions.

At 0712 they were answered. The countdown had resumed. The six-minute delay was due to a temperamental timing device in the blockhouse for starting the tracking cameras. Everything with TV-4 was still 4.0.

The countdown went on. . . T-5, 4, 3, 2, 1 and then it began in seconds instead of minutes. Now things were like a beehive as the launching crew went about the myriad details that had to be done in the final few seconds before the firing—the first-stage fuel tanks were being pressurized—valves allowing lox (liquid oxygen) oxidizer to boil off were closed—the pump heater for the lox tanks turned off—and almost before anyone had a chance to realize, the

firing switch had been clicked to "fire!"

At that moment the 11-ton rocket vibrated slightly. A tremendous burst of flame shot out from beneath it. The heat immediately turned the water—which was pouring into the flame deflector to protect the launching pad from the heat—into a gigantic cloud of steam.

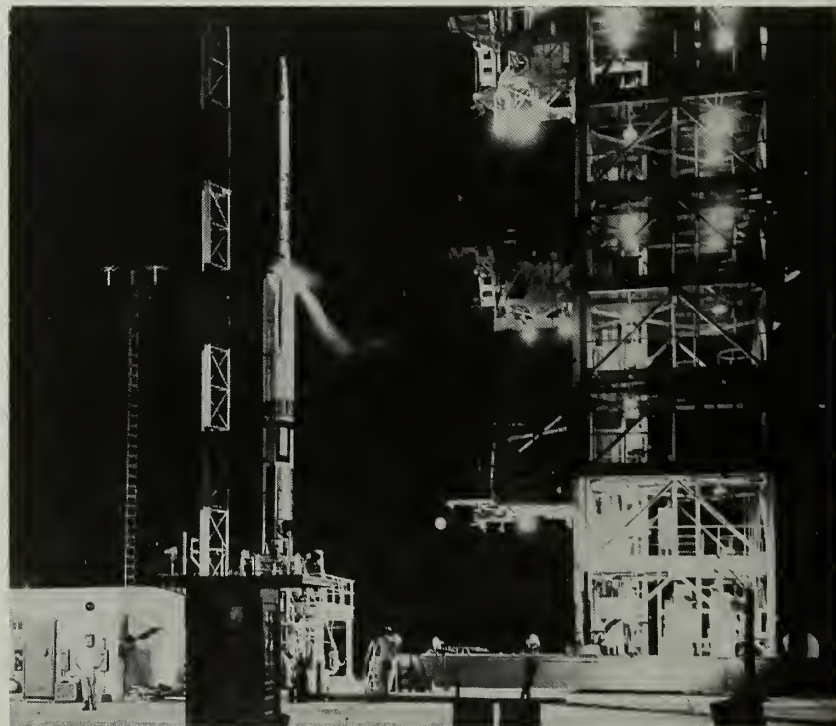
Slowly, but steadily, TV-4, trailing a tail of fire, rumbled up above the snow-white steam cloud. Up, up, up it went. In less than a minute it was almost out of sight. Its long narrow vapor trail began to spread out and zig-zag across the sky as winds coming in from different directions at high altitudes hit it.

Within 145 seconds after take-off, technical observers were jubilant when they noted a tiny spark as TV-4 zoomed out across the Atlantic. This indicated that the second-stage engine—which had never before been tested in flight—had ignited and separated from the first stage.

By 0726 the mighty rocket's job was done. All three of its stages had been expended and the tiny test "moon" that it carried in its nose had been separated from the third-stage shell. The launching of Test Vehicle Four was a success.

The only question remaining was whether an orbit had been estab-

GOING PLACES—Vanguard launching crew worked through the night before final countdown and firing that sent satellite carrying rocket spaceward.



lished. Although placing the 6.4-inch satellite into orbit was not the main purpose for TV-4's firing, naturally, everyone concerned was hoping for one.

Time ticked by. Still no word. Wonderment took over again. "After such a beautiful take-off, why had the Vanguard I failed to go into orbit? What could have happened?" . . . More waiting and more wonderment.

Two hours and 24 minutes after take-off, from the White House in Washington, President Eisenhower announced that Vanguard I's test sphere was in orbit.

The President was "delighted" when told of the Navy's feat, and he immediately congratulated the Navy on its success. Members of Congress, the Secretary of Defense, Secretary of the Army, the Army's Chief of Staff, and a great many others both in and outside of the government joined the President in wishing the Navy a "Well Done" on the successful firing of the complex three-stage Vanguard launching vehicle.

News spread rapidly after the Vanguard rocket soared aloft at 0716. By 0800 almost all naval personnel on duty in the nation's capital—where uniforms are optional for officers—showed up for work in blues.

At Cape Canaveral there was much rejoicing by the Vanguard launching crew as the success of TV-4 relieved them of months of accumulated strain and frustration. They celebrated by having a mid-morning "wetting-down" party that was climaxed by tossing J. Paul Walsh, Deputy Director of the Vanguard project, into a swimming pool.

Vanguard's success was also hailed by Dr. Wernher von Braun, Chief of the Army's missile-rocket team at the Army Ballistic Missile Agency at Huntsville, Ala. He said that the Vanguard launching was an unprecedented feat in rocketry, since it was started from scratch two years ago, and building a new, untested, complicated rocket that fast is something "never, never done before."

The Vanguard rocket is credited by the world's scientific community with significant contributions to the art of rocketry. Its first stage is said to be the first liquid-propelled rocket

ON HIGH—Navy's 20-inch satellite is suspended in air over the gantry for free-space radiation measurements.

JUNE 1958





TOPSIDE VANGUARD—Vanguard technicians work on rocket's nose cone containing sphere. Below: Instrument package goes into 20-inch satellite.



designed to get along without stabilizing fins or vanes. As a result of its success, a great many of the new missiles and rockets now under development are being designed that way. The savings in weight, and therefore in power needed to propel the vehicle into space, is considerable.

By using extremely thin air frames for all three stages of the Vanguard rocket, great economies of weight have also been made possible. The first-stage engine, as a consequence, requires only 27,000 pounds of thrust compared with more than 80,000 needed by other U. S. satellite launchers. (For detailed information on the functions of each of the Vanguard rocket's three stages, and other related information, see the December '57 issue of *ALL HANDS*.)

The Vanguard I test sphere, after circling the earth for almost three months, is still being heard "loud and clear." And from all indications, one of its two radio transmitters may still be sending out signals as many as 10 years from now.

The solar radio transmitter is designed to put out at least five milliwatts during the 60 per cent of the time that the Vanguard I satellite will be traveling outside of the earth's shadow. Its six rectangular solar batteries are distributed in a symmetrical pattern over the outside of the satellite so that one or more always will be turned toward the sun when the satellite itself is on the sunny side of the earth.

The solar batteries are one of the main novelties of the Vanguard test satellite. Each solar battery consists of 18 silicon cells—each two centimeters long, half a centimeter wide and one four-hundredths of an inch thick.

The lifetime of the solar batteries—now estimated at 10 years—will depend on how they stand up against meteorite bombardment and other physical hazards of outer space.

Six antennas, jutting vertically from the Vanguard test sphere, transmit the solar- and mercury-powered radio signals. Both sets of batteries are sensitive to variations in heat that will register slight changes of frequency. In this manner both battery systems enable scientists to record temperatures on the inside as well as on the outside of the tiny test satellite.

—H. George Baker, JOC, USN.



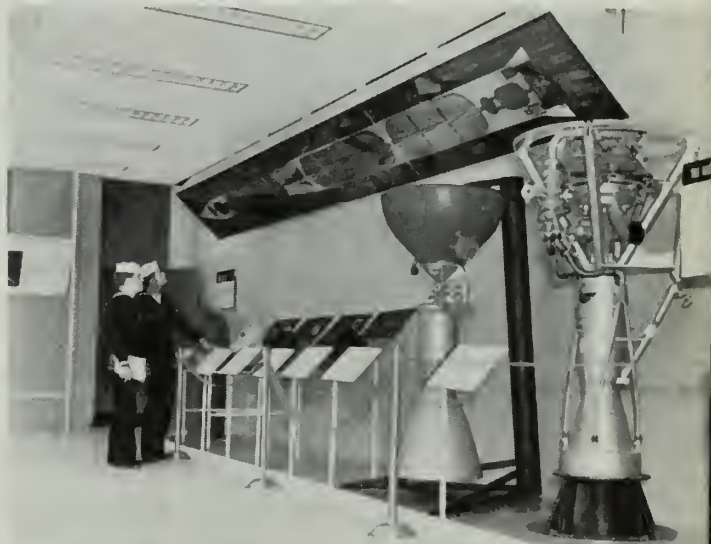
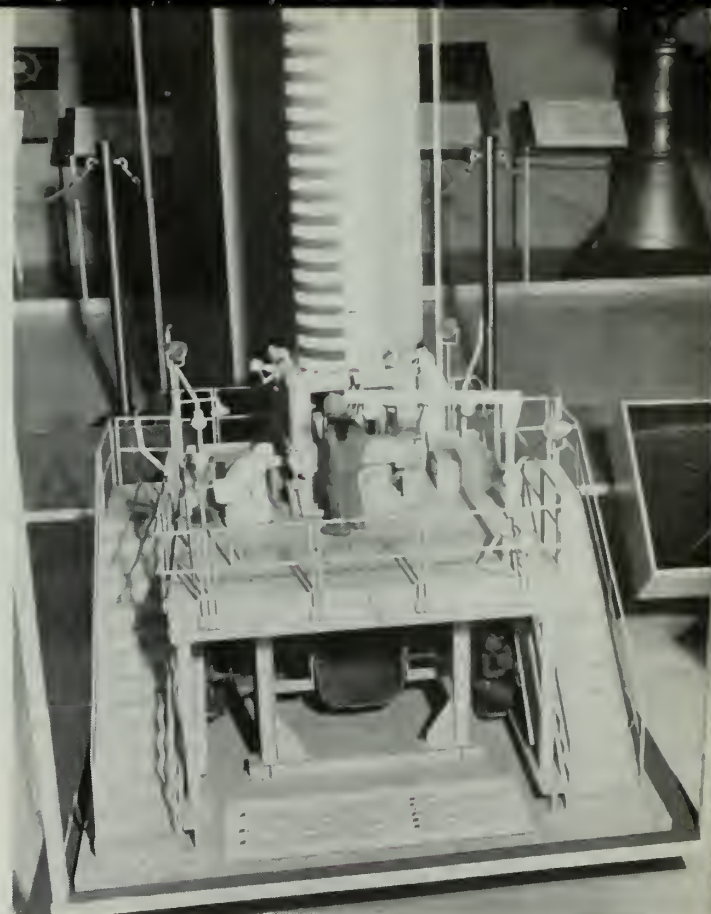
Keeping up with Vanguard

A HIGHLY INTERESTING and important scientific installation lies right in the heart of the nation's capital, unknown to most area residents and visitors alike. The Vanguard Computing Center should be on everyone's "must see" list.

The Center's primary mission is to whip out calculations fast enough to anticipate the path of a satellite traveling around the world.

In addition, the Center houses an exhibit which is open to the public. The pictures on this page will give you some idea of what you are likely to see there.

Top: Whitehat stands at Computing Center entrance. *Top right:* Model of launching platform is the high-point of the exhibit. *Right:* The displays include cut-away models of various components of the Vanguard rocket. *Lower right:* A representative shows two visitors the behind-the-scenes intricacies of the electronic brain. *Bottom:* The console operator sits surrounded by magnetic tape recording machines.





PRE-TESTED—When a Navyman sits down to chow at sea or ashore his food has been checked out by experts.

Here's How to Make Research

IN SPITE OF WHAT YOU READ in the newspapers nowadays, science is not exclusively concerned with guided missiles, rockets, Buck Rogers and trips to the moon. The food you eat, and the manner in which it is prepared is also a matter of scientific concern. It's undoubtedly a matter of concern to you, too, because you'll probably eat a considerable number of the Navy's meals before you take off for Luna.

As in tactical equipment, commis-

sary research never reaches its ultimate goal. There's always room for improvement as new materials and methods are discovered.

The people who are professionally interested in your appetites and good health may be found working at two field activities of the Bureau of Supplies and Accounts:

- The Commissary Research Division, U. S. Naval Supply Research and Development Facility, Bayonne.
- The Navy Subsistence Office,

located in Washington, D. C.

They work together with industry's Food Service Advisory Committee, which is a part of the National Security Industrial Association.

In these two BuSandA activities ideas in recipe experimentation and preparation, automation, work simplification and equipment design are conceived and pursued by engineers, dieticians, nutritionists, chemists, bacteriologists, radiologists and food technologists. This combination of human engineering and functional requirement gives you a system which is the envy of many and the equal of the best mass feeding agencies throughout the world.

Such a system is primarily a matter of painstaking research and close cooperation between naval and civilian personnel. Consider, for example, the various steps involved in testing recipes.

New recipes are tested and food products are prepared in the test galley, which is the original testing laboratory. Commissarymen play a major role in this process by preparing all foods even though they are carefully watched by civilian food technologists.

From the test galley, foods go to the taste panel room where Navy-men and civilian employees rate the products and recipes on an evaluation form. This room is illuminated with simulated true daylight so that

— And There's a Prize for the Best Mess

If your ship or station has the best mess in the Navy, then it may be eligible for an award.

Under the Ney Memorial Awards Program—named in honor of the late CAPT Edward F. Ney, SC, USN, who headed BuSandA's Subsistence Division during World War II—the Navy will honor the commands and commissary personnel of the most outstanding general messes, both ashore and afloat.

Permanent trophy plaques will be presented to the best mess and the runner-up in each category. The commissary officer and one enlisted man from each of the two winning messes will be guests for a four-day visit in August to Grand Rapids, Mich., for the trophy presentations.

In commenting on the Ney

Awards, RADM R. J. Arnold, SC, USN, Chief of The Bureau of Supplies and Accounts, stated that although the Navy has always been noted for good food, the Ney Awards should serve to stimulate competition for even better mess management and food service.

The Ney Memorial Awards winners will be selected from the outstanding general messes that were nominated by the district commandants and type commanders during the month of May. Nominations were based on food preparation, service, sanitation and management.

The details for the Ney Memorial Awards Program were announced through SecNav Inst. 5061.10 and BuSandA Notice 5061 of 21 Apr 1958. So, let's start cooking.

the actual color of the food—an important consideration—is not affected. The members of the panel are separated from each other by a partition so that their reactions will not influence or be influenced by another tester. Each member of the panel must at least like the food “moderately” before it becomes accepted.

Chances are, the recipe for the main course at your last meal is recorded with the Navy Recipe Service at the Commissary Research Division. In the card index system, each recipe and its variations in quantities of 100 portions are preserved.

Upon passage from the taste panel, the recipe or food product frequently proceeds to an operating Navy mess in the “field” to substantiate previous laboratory results.

Taste Good

Since it would be impossible to give every product a practical test, the CRD takes just the most promising to the Fleet. The others are limited to laboratory and simulated experimentation.

In boot camp you probably boarded a mock-up ship to give you some idea of what to expect from the real thing out in the Fleet. Simulation is also employed by the Commissary Research Division—so that its workers become more familiar with the problems which confront the ship’s cooks.

The *Lars* is a mock-up submarine in whose galley experiments continue ‘round the clock. One cook, in a space six by nine feet, prepares three meals a day plus a soup and sandwich call in the afternoon for 75 to 100 men. Since only one-third of the crew can be seated at one time, it takes three rotations to perform the cook’s job. During the “off-duty” hours another cook comes on and bakes all the bread, cookies, pies and cakes during the night.

All of this work has a purpose—the feeding technologists and industrial engineers watch and record data on every movement the cook makes. They do this to find out how the equipment may be more efficiently arranged or redesigned to be more useful to the cook. As a result of this study, a new submarine galley, which cuts the cooks’ labor



BETTER AND BETTER—Scale models help design more efficient galleys. Below: Evenness of heat is tested. This study led to 25 per cent more stove capacity.

30 per cent and reduces food losses by 20 per cent, was recently developed. The best part of this discovery is the greater variety of better food that the cooks are able to turn out. In addition, a cook, baker and messman can all work at the same time; in the old type kitchen just the cook was a crowd.

As a result of the CRD’s work, you will find these improvements on board the newer subs:

- Because the size of the oven has been changed, meat losses have been reduced from 36-37 per cent to 16-17 per cent, a saving of 20 pounds out of every 100 pounds of meat roasted.
- The deep-fat fryer can be used as a rapid-heating pot for frozen and fresh foods when it is not used for deep-fat frying. The fry kettle can be washed in the sink (which was not possible in the past).
- Hash brown potatoes and simi-



TASTE WILL TELL—Automatic joe pot is given taste test at Bayonne. Navy coffee is now brewed manually but a good automatic one would save hours.





BEHIND THE POT—Cook and Baker School at Newport turns out men with skill to handle Center's recipes.

lar materials can be cooked at an exact temperature on the griddle without using a heat-wasting pan.

- Ice cream can be prepared in each dish without the wasted labor, hardening and dipping which were formerly experienced.

- Twice as much coffee can be prepared in the same space occupied by the old two-gallon urn by squaring the shape of the urn. Since it's also insulated, the cooks don't burn themselves and the galleys are not quite so hot.

- A new coating is used on sinks and on warming table. It resembles the enameling on pots and can be controlled to any temperature.

- Water sources are provided over the range-top and food mixer so that constant trips to the sink are not necessary.

If you're ever part of an Antarctic expedition, chances are you'll be glad that the CRD exists. If you've

already been on a Deep Freeze tour you'll know what we mean. Workers in the preservation laboratory, which specializes in the study of rations for men under emergency and survival conditions, have devised methods of preventing explorers from starving in the Antarctic. Nowadays it's possible to carry enough food to survive in these bitter cold conditions, without total dependence upon another source of supply.

For instance, by compressing flour, approximately four times as much can be stored in a given space. By "squeezing" out the air, the volume is reduced to one-fourth that of regular flour.

The Commissary Research Division, after evaluating basic "trail" rations used in cold climates, has suggested improvements which facilitate handling and consumption of foods in icy temperatures. Some of the considerations were whether or

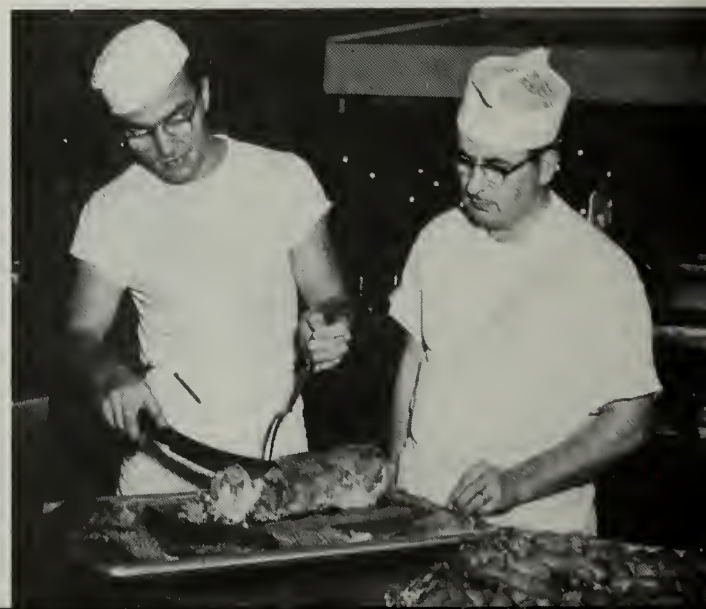
not the ration is difficult to open with mittens and whether instructions were clearly printed on the packages.

They tested the foods by heating or cooking the items under simulated frigid conditions.

Three particular characteristics technologists looked for were: Can the ration be eaten without being cooked (in case the necessity should ever arise)? Can the various furnished utensils be used with the item and how easily can the leftovers from the package be repacked? All of these seemingly minor details are not so insignificant to one surrounded by ice and snow.

You don't have to be in the Antarctic to experience extremely cold weather which greatly stimulates an appetite. If you have ever had to shake the snow or sleet from your cold weather gear, there were men in the same ship or in the same

ON THE SPOT—Navy Field Food Service teams make tests on board ship or station to improve cooking and serving.





NEW GEAR—New type aluminum alloy range and hot plate is tested. *Right:* Automatic potato peelers were tested.

building who wished they were outside. This is a typical problem which constantly confronts Navy food experts: to come up with ways to feed the deck crew and the men in the boilerroom and at the same time satisfy them equally.

You've undoubtedly seen a very hot galley at least once in your Navy career. Now the trend is away from kitchen heat losses which make these areas so uncomfortable. The cooler kitchens are arrived at by insulating kettles. It was found that this reduces wasted heat by 50 per cent and eliminates accidental burns should a man be pitched against the kettle. Other advantages of this innovation are conservation of precious steam and reduction of weight losses of meat.

One of the newest improvements at Bayonne is a simple method of automatic water distribution to the steam-jacketed kettles. Instead of

guess-work and trial-and-error methods, the cook will be able just to set a dial, push a button and presto—the correct amount of water will be delivered to help make a more perfect dish.

If you're a coffee-drinker, you probably place high value on that steaming cup of java—especially after a couple of hours topside in nippy weather. The kitchen scientists have not neglected the old Navy pastime. Soon, on small ships, the touch of a button will be the only labor required to brew enough coffee for a ship's crew.

And that's not all. The coffee will feed into a decanter, the mechanism will be washed and the grounds emptied into a drain chamber—all automatically.

If you've ever worked in the galley you've probably held potato peeler in hand at some time or another. If so, take notice—the Commissary

Research Division has been testing automatic potato peelers to do all the dirty work. Just drop them in and out they come, clean as a whistle.

They say diamonds are a girl's best friend—but if you really want to win somebody's heart, here's a suggestion: Give her a combination food mixer, potato peeler, steam kettle, pressure cooker, refrigerated kettle, proof box, meat grinder, vegetable slicer and oven. The men at Bayonne call this an experimental "kitchen in a corner" which is being designed for submarine use. About the size of a telephone booth, it also can bake and roast. Or there's the extra large aluminum paddle used to stir liquids in 60-gallon pots. We wouldn't advise you to invest in one of these unless you fully realize the several other purposes it could serve.

—William Miller, JOSN, USNR

WHAT'S COOKING—Cooks and bakers throughout the Fleet can prepare better food as a result of CRD's research.





NOTE THIS—Tennessee Ernie Ford sings with Navymen. Rt: Alan Ladd and William Bendix take break during filming.

Hollywood Visits the Navy

NAVYMEN ARE likely to see stars any time of the day or night whether in boot camp, shore station or on shipboard. The stars referred to are not the celestial bodies that are used for navigation, nor are they the stars a boxer sees just before hitting the canvas. These stars are from the bright lights of show business. They may possess a heavenly body and/or deliver a knock-out performance for Navymen they visit.

People of the entertainment world have for many years taken time off from their busy routine to pay friendly visits to Navymen on board ship or ashore. At times they may present an entire show or at other times it might just be an informal person-to-person visit.

Another occasion for stars to "shine" in the Fleet is when they find themselves cast in the roles of Navymen. In such cases business is



HATS OFF—Navymen of NAS Oakland cheer Doris Day. Rt: Diana Dors visits DDE. Above: Waves with Teresa Brewer.



ALL HANDS



STARS shoot movie scenes onboard LST.

— Stars at Sea

combined with pleasure for all as actors ask sailors for technical assistance or use Navy ships and gear to better tell their Navy story.

In either case their visits spread goodwill to Navymen who in turn spread goodwill and friendship around the world. On these two pages is a collection of photographs taken from the files of ALL HANDS that pictures just a small sample of these many visits.

BOB HOPE clowns it up for sailors.



WHISTLE BAIT—Jayne Mansfield and singer Erin O'Brien visit Navymen on Guam. Below: Anita Ekberg poses with Pacific Fleet destroyermen during visit.





tion of the cruise. A second in command of the Squadron movement was named, and a date set for the cruise.

That date dawned a gray and cloudy day that cut down the cruise attendance by some 200. The wind blowing along the docks at the Norfolk Naval Base where four of the ships loaded, gave rise to thoughts of a heaving sea off the Capes. A lot of good natured kidding went along with the loading as the men who had no guests going out for the day welcomed their shipmates and their families with warnings about the state of the sea and what the wind would do to carefully arranged, but still fragile, curls. The same thing was happening at the Little Creek Amphibious Base where the two LSDs were taking on their passengers.

Here and there Navy blue Wave's uniform could be seen. Some 100 of the Waves stationed in the Norfolk area had been invited to make the cruise. Also in the crowd were 27

Navy Family Cruise: It's

SOME WORE RED toreador pants—black slacks—blue Bermuda shorts—or sports dresses—but all of the nearly 1000 dependents and guests aboard the ships of Transport Amphibious Squadron Two were wearing grins when their day long dependent-guest cruise ended.

Even old man weather couldn't dampen the spirit of the visitors who made the cruise out of the Norfolk Naval and Little Creek Amphibious Bases to an area off the Virginia Capes.

A 20-knot wind whistled through the rigging of *uss Chilton* (APA 38) and *Rockbridge* (APA 228), seeking out the dependents with its chilling blast.

Guests coming on board *uss Thuban* (AKA 19) and *Vermilion* (AKA 107) checked the overcast skies for a glimpse of the sun, as did those on the LSDs *Rushmore* (LSD 14) and *Hermitage* (LSD 34).

They were a cheerful and interested group watching for the first time their husbands, sons, or neighbors at work. Despite wind and spray, they crowded the rails of each ship to watch other members of the Squadron go through their paces as different steaming formations, atomic washdown equipment and underway

replenishment gear was demonstrated.

This is believed to be the first time that an entire squadron of ships ever held a dependents-guest cruise. CAPT. G. E. Peckham, Commander of the Squadron, explained that the theme of the cruise was to show our guests "what we do and why we do it."

The idea for the cruise had been in the captain's mind for some months. He requested that he be given two weeks of Squadron training which would include a one-day dependent's cruise.

Plans for the cruise were as complex as a campaign. A group of wives were asked what they wanted to do and see aboard a Navy ship underway. They answered that they wanted to stand watch with their husbands, see where he works and lives, and they wanted to see ships operating as a team, maneuvering or using a "highline or whatever that thing is their husband rides between ships at sea."

All of these items and more too were outlined in Annex B to a Com-TransPhibRon Two Operation Order. This official document outlined in terse Navy terms the general situation, mission, and manner of execu-

teenage boys from Richmond, Va., who were going to sea to obtain a first-hand look at what may be their future careers.

When the last guest was safe on board, the ships began slipping one-by-one out into the stream and headed to sea in a column. *Hermitage* and *Rushmore* joined the column as it passed the Amphibious Base.

A tour of any of the ships at this time would have found dependents everywhere. Some were already being led by guides on tours of the ships. Others had gone below to enjoy coffee and doughnuts, rolls or cookies that were available all day, and the more hardy individuals crowded the wings of the bridges as they looked for, and found, a captain's view of all that was going on.

Back on the flag bridge aboard *Chilton*, where CAPT Peckham was directing the movement, one lady was sporting a foul weather jacket with "COMMODORE" printed on the back and another was wearing a blue raincoat complete with brightly shining eagles.

A Wave second class had cornered her male counterpart and was besieging him with a running "What is that? What are they doing now? Do they have to blow that whistle?"

It hurts my ears. But this is fun!"

One of the announced purposes of the cruise was to help implement the "people to people" program by demonstrating the importance of the role of the individual, the ship, and the squadron in maintaining a strong and flexible amphibious force. This program was in full effect. On one ship proud parents who had never seen the ocean before, and had driven all the way from the Midwest for this cruise, watched their son work with the signal gang and for the first time had a reasonably clear picture of what he does and why he does it.

CAPT J. M. Lee, USN, skipper of *Chilton*, greeted the wife of one of the engineering gang CPOs saying, "Your husband would certainly be an important man in any ship's company." Of course she didn't go around the ship bragging about what the CO said, but she didn't come down off 'cloud nine' either. Now she knows why her husband brings home the dirty shirts and why he

While many of *Chilton's* guests were watching the filmed invasion, a real one occurred back in the CPO quarters. Led by an intrepid PO3, a group of youngsters descended into the CPO lounge, set up a motion picture projector, and were ready to watch an "adult western" designed just for children. The displaced Chiefs and their families headed for the weather decks to watch demonstrations taking place there.

During the morning hours of the cruise the six ship Squadron went from one formation to another to show the land-locked guests what ships could do at sea. They demonstrated sinuating evasive steering, an antisubmarine defensive measure.

It was during these maneuvers that you would have noticed a pretty young brunette wearing a scarf on her head, peeking over the port wing of the *Chilton's* bridge, watching the maneuvering with unconcealed interest. Her name, Joan Duffy. She was the wife of LTJG John A. Duffy—who at that moment had the deck.

As she watched her husband dash from one side of the bridge to the other she said, "It's all very exciting watching this maneuvering." She held her breath as one of the LSDs crossed *Chilton's* bow and then added, "I'm enjoying every minute of it, wind and all."

And it was with pride that she watched her husband take bearings

A Picnic

sometimes has grease worn into the skin of his hands.

As the ships cleared the channel and speed picked up for the sea run, the crews were quick to introduce damage control measures to stop the spread of goosepimples. Foul weather jackets soon covered pretty sweaters and many young ladies appeared on deck wearing peacoats and work jackets.

In *Chilton*, the crew's lounge was crowded as the guests gathered to hear a discussion of the Medicare and Survivors Benefits Acts. Chief Gunner's Mate Cameron from the PhibLant Career Appraisal Team was besieged by questions following his discussion, most of them coming from Navy wives who—in the words of one—learned of benefits she'd "never even thought of and had never used."

Similar rights and benefits discussions were conducted in the other ships by a CAT member from either PhibLant or ServLant.

On *Chilton's* mess deck a large crowd gathered to see a film of an amphibious landing. By watching this they were able to obtain an idea of the tasks performed by each of the three types of ships represented in the TransPhib Squadron.



AT SEA dependents of Transport Amphibious Squadron Two learn routine.





BACK IN PORT—Dependents leave USS *Chilton* (APA 38) after a day's cruise with the family's Navyman.

and relay the captain's orders to the steersman. "This gives me a better understanding of his job," she explained before resuming her unofficial maneuvering watch.

Leaving her and crossing through the wheelhouse to the starboard side you would have heard CAPT Lee say to his communication officer, "Next time there is criticism of the radio, better check on the voice behind it. There was a lady's voice on it just now and I bet they could hear her loud and clear all the way over to *Rockbridge*, with or without the radio." Several of the ladies on the various ships and on the flag bridge were manning the inter-ship voice circuits, rogering calls and passing messages with an ease presumably gained through long hours spent on a telephone.

As the formation broke up into two columns of ships, *Hermitage* passed between her squadron mates demonstrating her atomic washdown equipment. Plastic piping installed on the ship's weather decks is charged with sea water at fire main pressure and in the event of a nearby atomic blast the spray would be instrumental in washing off radioactive fallout.

While still in the two abreast formation the use of the highline method of personnel and material transfer was demonstrated. The gear was rigged and the transfer made, accompanied by the clicking of hundreds of cameras. On each ship the action taking place was described over a loudspeaker system, a continuation of broadcasts designed to answer many of the questions asked by the guests, which began shortly after the ships got underway.

As the exercises came to an end, everybody headed for the galley and the wardroom for noon chow. The luncheon menu on *Chilton* included fried chicken, roast beef and apple pie. Over on *Thuban* and *Hermitage* it was grilled steak and strawberry shortcake with whipped cream. *Vermilion* loaded trays with turkey and roast beef while *Rockbridge* served baked Virginia ham. One wife finally understood why her husband's diet never worked. "You starve at home, but stuff yourself here," she said.

In *Chilton's* CPO quarters the invaders had beat a temporary retreat and the wife of one chief commissaryman complained cheerfully about tired feet after being led through the ship on a tour. When chow was piped the shrill whistle startled one wife into exclaiming: "Is that noise necessary?" A chief replied, "Don't blame me, madam. Blame your husband. He's the boatswain's mate."

The Waves visiting the six ships were having a big time learning what their male counterparts do at sea. According to CAPT Peckham, a cruise such as this gives the Waves an insight into their job in the Navy. "After all," he said, "they are part of the sea service and a cruise such as this will better equip them for their Navy duties."

For example LT Rosemarie C. Walsh, usn, who led the Wave group aboard *Chilton*, was recently assigned to ComPhibTraLant operations. The voyage gave her a chance to learn about underway operations from a good teacher, Quartermaster First Class H. N. Dye, usn, attached to the Squadron Flag Allowance, who in turn said she was a good student. They had been attached to the same command once before, the Wave Training Unit, Naval Training Center, Bainbridge, Md. Dye was a drill instructor there.

A Wave guest on *Thuban* said the cruise was an experience that "I'll never forget. I never thought I would really ever sail on a Navy ship."

Another group that was having a big time on the voyage were the boys from Richmond. From the time the ships sailed until they returned to their berths the boys were on the move, exploring every nook and cranny open to them.

One of the boys, Denny Wachter, explained that they were winners of a contest sponsored by Navy Recruiters over WRVA-TV in Richmond. They had each written a letter telling why they would like to go on a cruise and the writers of the best letters were chosen to take part in a "Know Your Navy Quiz." The recruiters sent the boys study material and on the live program they were asked the names of famous

USS *ROCKBRIDGE* (APA 228) was one of six TransPhibRon Two ships participating in dependent-guest cruise.





ON THE JOB—Better-half watches her man crimp sheet metal. Rt: Mother and Dad learn part son plays to run ship.

ships and admirals, and other questions of nautical interest. The winners made the cruise while those who finished in second place received plastic aircraft carrier models.

Thirteen-year old Denny commented that it was getting "kind of rough out here" when the ship approached the turnaround point 30 miles ESE of Cape Henry. But he still hoped to join up when he becomes old enough.

During the afternoon hours the individual ships put on demonstrations for the entertainment and edification of their guests. On *Vermilion* the guests watched a mock amphibious landing staged on a large board and utilizing 100 model ships and planes. The special lighting and taped sound effects used, made the scenes realistic and thrilling according to viewers.

Another mock invasion demonstration was given in the recreation room of *Chilton*. The ship's guns, hatches, davits and anchor windlass were demonstrated throughout the day. Landing craft familiarization was the subject of the demonstrations on the Squadron's second APA, *Rockbridge*, where a boat display was set up.

On *Thuban* visiting housewives were treated to a demonstration of how to make a modern salad. This was presented by the galley captain. For those seeking a little more excitement the AKA provided guided tours and demonstrated a fire fighting suit.

Both of the LSDs ended their cruise day by ballasting down, opening their stern gates and launching their LCU cargo. This event provided one of the best photographic opportunities of the day and the visitors were quick to respond with their cameras.

Many of these pictures were carried to nearly all parts of the United States by guests who traveled hundreds of miles to make the cruise. Some 215 of the nearly 1000 cruise guests came from areas more than 100 miles from Norfolk. They represented 32 states reaching west to California, south to Florida and north to Maine, and the District of Columbia.

A seaman's mother from Tennessee said she had "an extremely enjoyable day at sea" and Mrs. Tillie Padilla, mother of Edward Joe Padilla, YNT3, from Albuquerque, N. M., announced that she "did not believe that I would ever enjoy anything so much." Mr. and Mrs. William A. Crandall, who made the trip from Van Nuys, Calif., to cruise with their son William A. Crandall, FP3, stated, "We wouldn't have missed this event for the world, and we are certainly enjoying ourselves."

These guests who came from the hinterlands of the USA took home with them souvenirs of the cruise along with many happy memories. Those on board *Thuban* each received a ballpoint pen engraved with a picture of the ship, the date, and the event. They also received cards certifying them to be honorary crew members.

Several other ships gave away boarding prizes. On *Vermilion* an automatic knife sharpener, a flash camera, and a steam iron were awarded to lucky guests. On board *Chilton* five perfume sets, two salad sets, a radio and a wrist watch went to those who held the lucky numbers. Those who held the proper tickets on *Hermitage* took home pen and pencil sets, ball point pens and other items.

Over on *Rushmore* everyone was made an honorary crew member complete with certificates. First to receive a certificate was Mrs. K. M. Worthy, who, as the former Miss Eleanor Blewett, sponsored the ship when it was launched in 1944.

LSD 14 also presented a scroll to Linda Jenkins for winning first place in the steering contest for 13-to-15-year olds. "Mrs. *Rushmore*," Carol Patterson, wife of James Patterson, ET3, usn, and "Miss *Rushmore*," Glenda L. Bailey, PNSA, usn, one of 16 Wave guests, were also presented scrolls after being selected by the ship's recreation committee.

With the completion of all ceremonies, the Squadron returned to port. The dependents left the ships after an eight-hour cruise in which they saw what Navymen everywhere do and why they do it.

—William Prosser, JOC, usn.

NEW SHERIFF—Wife pins on badge to stand watch with husband while learning how Navy operates at sea.





THE BRIDGE—CO looks on as Chief of the Watch checks range of guide ship. RT: Officer of the Deck on watch.



AT SEA — Corry crew members man pilot house (above), enjoy mess time and watch radar in CIC (below).

This Is Corry

FOUR U. S. NAVY ships kicked up a high wake as they steamed at top speed through the chilly Atlantic. They formed a half-circle that covered many square miles. They were visible to each other as tiny dots on their respective radarscopes.

On each of the destroyer-type ships a concave radar antenna swept in a continuous circle, permitting each ship to "see" many miles in all directions.

Their target: hostile aircraft. *Their objective:* to warn convoys and other naval ships of approaching enemy planes or guided missiles. *Their name:* Radar Picket Destroyers.

Typical of these ships is *uss Corry* (DDR 817). Like most of her sister ships, she has been converted from a standard destroyer to a sea-going radar station. These destroyer radar pickets also have marine capabili-





VISUAL CONTACT made with ship, planes during patrol.

—Radar Picket

ties and can do double duty, detecting submarines as well as aircraft.

To accomplish her role as a radar picket destroyer, *Corry's* sensitive radars are connected with her combat information center which is the heart of the ship's detecting equipment. The DDR's CIC is larger than that of a conventional destroyer. Here, CIC men work with gunnery control teams as a unit. They also direct aircraft to intercept enemy air strikes. One of the main objectives of CIC is to report any aerial raiders trying to sneak in to attack the force.

Information picked up by the ship's air defense radar in the combat information center is charted on an illuminated status board. This information is then relayed to the commanding officer and air controller. *Corry's* defense radar is located on her stern. Conventional destroyers do not have this type of radar.

The DDRs have been greatly improved and modernized during conversion. Red leather padded seats, formica table tops and tile decks are a big step from the old type mess, but when it's rough, and a DDR is usually rough, you still have to hold your tray while you eat.

On *Corry*, the messhall doubles as a crew's lounge and movie theater, and if necessary, a hospital space. Here, members of the crew gather after working hours and write letters, talk to their shipmates and drink the always available Navy coffee.

uss *Corry*, commissioned DD in 1946, was converted from her destroyer tasks in 1953. She was the third ship to bear this name. The first was stricken from the Navy under an arms limitation agreement in 1930. *Corry* number two, DD 463, was commissioned in 1943 and saw rugged action in the Atlantic during WW II fighting the U-boats and participating in the Normandy invasion. She sank 6 Jun 1944 after striking a mine while laying down a heavy barrage on the coast of France.

During the present *uss Corry's* 12 years, she has steamed over 250,000 miles as part of the nation's sea-going defense team. —Edward C. Lisle, JOSN, USN.



ON PICKET—Gunner's mate loads ready service box.
Below: USS *Corry* follows mate through cold Atlantic.



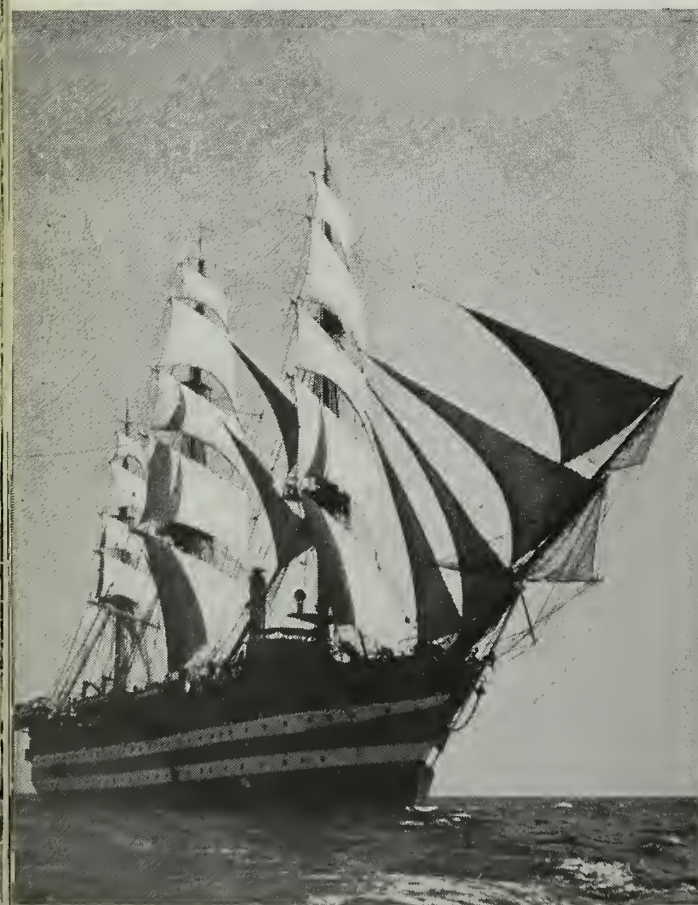


Sailing Ships

IN DAYS WHEN SHIP TALK is about atomic propulsion and how soon it will replace steam, it seems unusual to talk in the present tense about Navy ships still using wind as their source of power. However, there are still a number of these old time canvas spreaders cruising the sea among the high-powered ships of today.

Approximately 10 different foreign navies and the U. S. Coast Guard maintain these sailing ships as training vessels, usually in connection with their naval academies. Some of these windjammers—like Argentina's *Presidente Sarmiento*, launched in 1896—are salty old veterans of the sea but others like the Chilean sailing ship *Esmeralda* are not so old as their canvas-studded masts make them appear, and were launched as late as 1952.

Although the United States Navy no longer has a seagoing sailing ship, there is still one whose name is carried on the vessel lists. She is IX 21, the old frigate





of the World

Constitution, well known by her nickname *Old Ironsides*. *Constitution* is berthed at Boston Naval Shipyard. Here, her historic wooden masts can be seen contrasting with the radar masts of modern Navy ships.

Clockwise from upper left: (1) Argentina's training ship *Presidente Sarmiento* makes way with all canvas spread; (2) *Ne Almirante Saldanha* of Brazilian navy moors alongside *USS Tarawa* (CVS 40) at Hunters Point; (3) *Sagres* shown at anchor at Lisbon is used by Portuguese Naval Academy; (4) Spanish naval training vessel *Juan Sebastian de Elcano* takes part in International Fleet reviews; (5) United States member of the canvas fleet is the Coast Guard training bark *Eagle*; (6) *Esmeralda* of the Chilean navy feels for wind; (7) Steel-hulled sailing ship of Finnish navy was built in 1902. Her name, *Suomen Joutsen* means The Swan of Finland; (8) *USS Constitution*, is now moored at Boston; (9) Italy's *Amerigo Vespucci* trains midshipmen.





BACK IN ACTION—Reservists of Ship Activation Team 13-3 put their training to test demothballing LSM 320.

Reservists Form Ship Activation Teams

MANY OF US THINK of Reservists as part-time sailors who train regularly so that in an emergency they can quickly join the Regulars in combat operations.

This, of course, is true. However, some Naval Reserve training programs emphasize aspects of combat readiness that are quite a bit removed from manning gun mounts or piloting aircraft. One of these is the Ship Activation Team program whose mission is to demothball ships and ready them for sea duty.

Ship Activation Teams are trained to start the demothballing process

while the ship's crew is being assembled. Once the crew reports, the team may move on to another ship and start the reactivation procedure all over again.

Members of Ship Activation Team 13-3, Swan Island, Portland, Oreg., got a chance to put their training to the test recently when they reported for two weeks' active duty for training (AcDuTra) with the Columbia River Group, Pacific Reserve Fleet.

The Reservists—seven officers and 13 enlisted men—were assigned the task of reactivating USS LSM 320. It was quite an undertaking for the

men, representative of a variety of civilian occupations. Among the Reservists were a county sheriff, a hardware store operator, a welder, a feed store manager, a statistician, truck drivers, mechanics and electricians. Many of them had not served on full-time active duty, other than training duty, in more than a decade.

The AcDuTra tour marked the first time SAT Division 13-3 had gone aboard a decommissioned ship to reactivate major portions of its space, machinery and equipment. The work promised to be dirty and often frustrating.

Rolling up their sleeves, the officers, chiefs and whitehats started the first phase of their assembly-line technique—the marking of all parts and tools for activation. Then preservative was removed and the areas were cleaned up. The heating, ventilating and electrical systems were put in operation. Guns were assembled and the engines turned over.

Even the ship's whistle was mounted atop the mast and tested. Finally, when the landing ramp was lowered, the Reservists had accomplished their mission.

There are 14 other SAT divisions taking part in similar training operations on both coasts. If and when M-day comes, you'll find these SAT teams hard at work, readying the Reserve Fleets for action.

HOME TEAM—Portland Oregon Reservists spent two weeks on AcDuTra taking active part in Reserve Ship Activation Team program putting ship in service.



LETTERS TO THE EDITOR

More About That Last Shot

SIR: About your last-shot hassle in the February 1958 issue of ALL HANDS:

As I recall, I was on board *uss Eaton* (DDE 510, Ex DD 510) while operating with a few minesweepers (YMS) about the first week of September 1945. We on *Eaton* were covering the YMSs who were sweeping the entrance of the Yangtze River for mines. On our first day on station, we saw a Japanese river gunboat trying to break clear into the open sea. We signalled to the gunboat but it gave no recognition signal and kept on going. We fired a shot across its bow and it stopped.

We sent aboard a prize crew and after we had finished sweeping the mines, *Eaton* and the gunboat proceeded to Shanghai on 8 September. I don't know what happened after that because I was transferred back to the States on the 9th.—Ramon I. Munoz, SDC, *uss Gen H. W. Butner* (AP 113).

• We've learned to be pretty careful when dealing with questions of this sort, so we passed the buck to those better qualified to speak than we—the Division of Naval History. They dug through the records and spoke:

"Munoz is correct as to the area and nature of operations of *Eaton*. However, logs and war diaries of the ship for the period 15 Aug through 30 Sep 1945 do not show that *Eaton* fired her guns in an action of any nature against

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

Japanese shipping. The first mention of encounter with Japanese shipping appears in her log and war diary for 9 Sep 1945, when a Japanese vessel was directed to stop and immediately complied."

To back up its statements, *Naval History* enclosed extracts of *Eaton's* war diary which cover all Japanese shipping encounters mentioned in her records covering the period 15 Aug through 30 Sep 1945. Here you are:

9 Sep 1945: At 1324 sighted an unidentified ship standing out of the Yangtze River and steaming to the eastward. Got underway to investigate. At 1400 the ship was identified as an armed Japanese vessel, LSM 144, flying the Japanese ensign. *Eaton* directed the Japanese ship to stop immediately. The ship acknowledged and anchored, with *Eaton* lying to, 4000 yards abeam. PC 491 was directed to go alongside Japanese ship and direct her to proceed and anchor in vicinity of *uss Robinson* (DD 562). The ship got underway with *Eaton* and PC 491 acting as her escort. At 1530 sighted four unidentified ships, hull down, over the horizon. At 1710 *uss Cony* (DDE 508 Ex DD 508) was ordered to intercept ships and instruct them to return to their port. At 1745 *Cony* reported two of the ships to be an SC and an AOG. At 1840 . . . had anchored to observe them for any attempted movement and return in company with them the following morning.

10 Sep 1945: At 0530, *Cony* was directed . . . to get underway at dawn with the four Japanese craft and proceed to anchorage. At 0900, *Cony* with Japanese vessels arrived in the anchorage area.

12 Sep 1945: At 1002 . . . a boarding party of two officers and 12 enlisted men left the ship to board the Japanese ships *Ataka*, *Kasei*, No. 1 *Koho Maru* and *Tone Maru* to investigate violation of surrender terms by getting underway and leaving their port. The boarding party returned aboard at 1333, having rendered inoperative the armament of the Japanese vessels. At 1900 . . . a prize crew, fully equipped and consist-

ing of three officers and 12 enlisted men boarded the Japanese ship LSM 144 detained at anchor.

13 Sep 1945: At 0955 . . . the prize crew returned aboard from the Japanese LSM 144. At 1445 a communications watch consisting of one officer and three enlisted men boarded LSM 144 for temporary duty.

So that's the official story.—Ed.

Readjustment Pay for Reserves

SIR: Under the present law, it takes at least five years' continuous active duty for Reserve officers who are released from active duty to qualify for readjustment pay. Does any previous active duty count, such as World War II time? If so, does time as a Naval Aviation Cadet (V-5) from February 1943 to July 1944 count as active duty time under this law? If a Reserve officer accepts this readjustment pay after being involuntarily released, does it in any way affect the twenty-year (combination active and inactive duty) retirement he is entitled to at age 60?—R.E.W., LCDR., USNR.

• To qualify for readjustment pay, you must have at least five years of continuous active service during the current tour with breaks in service not to exceed 30 days. This five-year span, plus all earlier periods of active duty is used in computing service creditable for readjustment payment. Service as a Naval Aviation Cadet is creditable from the date of reporting for active duty in that status; however, inactive service as an Aviation Cadet is not creditable for this purpose.

Acceptance of readjustment pay will in no way affect later entitlement to Naval Reserve retired pay upon attaining age 60.—Ed.

Does VA Have Your Address?

SIR: When the Survivor Benefit Act (Public Law 881, 84th Congress) went into effect back in 1956, I reinstated my National Service Life Insurance which had been under waiver since 1951. It is my understanding that the Veterans Administration will mail out dividend checks to NSLI policy holders soon. Can you tell me if the VA is notified by the Navy whenever I have a permanent change of duty station, or is it up to me to keep the VA posted on my current address?—L.D.G., SHC, USN.

• The responsibility for keeping the Veterans Administration advised as to your correct permanent address is left up to you. And, we might add, normally it is best to use your permanent home of record or an address that does not change whenever you receive change of duty orders.—Ed.

Korean Educational Benefits

SIR: On page 26 of your January issue, you carried an excellent story about Korean GI Bill educational benefits.

It contained one error, however, that you may wish to correct in a future issue. The "basic service period" for GI eligibility was given as 29 Jan 1950 to 31 Jan 1955.

The basic service period actually began 27 Jun 1950—not 29 Jan.—J. Norman Lodge, Director of Information, Veterans Administration.

• Thanks for setting us straight. As we keep telling ourselves, "Next time more hits—no typos—no errors."—Ed.

Two Tangs

SIR: I am a high school junior. While doing reference work I came across an article from a Boston newspaper, dated Monday, 15 Oct 1945. It stated the USS *Tang* was sunk by its own torpedo on 25 Oct 1944. A few days later I read in a pamphlet entitled "Atomic Age Submarine" (reprinted from ALL HANDS) this phrase: "Three of these advanced-type Guppy submarines have been launched. They are USS *Tang* (SS 563), *Trigger* (SS 564) and *Trout* (SS 566)."

I would like to know if the Boston newspaper was in error. If it was not, kindly explain the quote from "Atomic Age Submarines."—R. H., Westville, N. J.

• The explanation concerning the newspaper article and the ALL HANDS story is quite simple. Two entirely different submarines are the subjects of the articles to which you refer. Both are named *Tang*. One was SS 306, lost as the Boston newspaper reported, in October 1944. SS 563 is a new type of fast attack boat commissioned in 1951, and assigned the role of continuing the traditions established by the original *Tang*—the SS 306.

The first *Tang* had quite a history. She was lost while blockading the Formosa Strait on 24 Oct 1944. She had 93,824 tons of enemy shipping to her

Full Sea Bag

SIR: There appears to be some doubt on board my ship as to the requirements of a sea bag for all men below CPO. Can you tell me where I can find this information?—M.L.W., BT2, USN.

• Requirements for a full sea bag (minimum outfit) for enlisted men below CPO can be found in Article 1130 of "U. S. Navy Uniform Regulations, 1951." Article 1131 contains a list of optional articles for the sea bag.—ED.

credit when her last torpedo was fired at a crippled transport. The tin fish ran in a circle and 20 seconds later exploded against the sub's stern, sending *Tang* to the bottom.

Her fifth and last war patrol began in September 1944. In mid-October *Tang* sank two heavily-laden freighters. On 23 October she came across a large convoy composed of three cargo ships, a large transport loaded with troops, and tankers. Disregarding the heavy force of escorts, *Tang* made a night surface attack, firing a spread of torpedoes that scored hits on the three cargo ships. The submarine then swung her sights on a large freighter when it was noticed that the troop transport was bearing down to ram the sub.

Evasive maneuvering carried *Tang* clear of the troopship, but she was boxed in by the three blazing tankers on one side and the freighter, transport and several destroyers on the other. Another torpedo attack delivered, despite a deadly hail of bullets and shells, tore into the freighter, and disabled the transport.

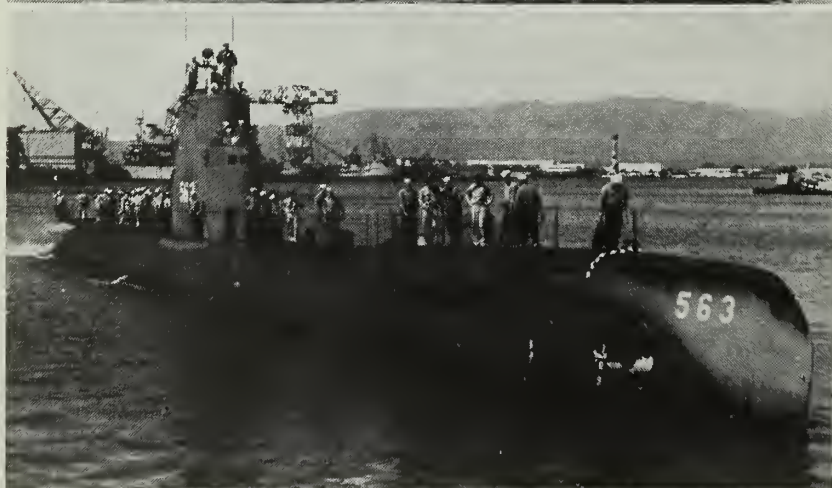
With her tubes empty the submarine broke through the escorts to reload. In the action which lasted only 10 minutes, *Tang* reported scoring hits on seven enemy ships. The three cargo ships were sunk.

Another heavily-escorted convoy crossed *Tang's* path the next day and again the Pacific Fleet boat made a surface attack covered by the darkness of night. The tankers in the convoy all carried planes on their decks and even the bows and sterns of the transports were piled high with plane crates jammed in with the troops. Six torpedoes, fired at a range of less than 1000 yards, exploded as planned, two against a transport, two hit a tanker, and two hit another transport. Again boxed in, *Tang* charged the enemy at full speed. A torpedo hit a tanker which spewed flames, a second stopped a transport, while a third fish struck a destroyer, blasting her ASW intentions. These attacks sank two more cargo ships.

With two torpedoes left, *Tang* moved in on the crippled transport. The first fish ran true and hit the target, but the second ran in the circle of self-destruction. Only nine members of the crew including the skipper, CDR Richard H. O'Kane, USN, escaped to be taken prisoner by the Japanese, and were liberated after the war.

Tang received two Presidential Unit Citations for her war patrols and the Navy decided that her name should live on. SS 563 was christened USS *Tang*, but there the resemblance between the two submarines ends. The new *Tang* is 262 feet long, 49 feet shorter than the World War II boat. Its new diesel-electric power plant gives SS 563 a surface speed of more than 20 knots and it has a rated submerged speed of more than 17 knots. Snorkel equipment gives the atomic-age *Tang* the ability to operate underwater for unlimited lengths of time while the World War II boat was limited by the life of its batteries and the amount of air in the hull.

It is not unusual for a ship to be named after a vessel that was lost in combat. For example, each boat in the *Tang* Class bears the name of a submarine lost during war action: USS *Trigger* (SS 564) for SS 237, lost in March 1945; *Wahoo* (SS 565) for SS 238, lost in October 1943; *Trout* (SS 566) for SS 202, lost in February 1944; *Gudgeon* (SS 567) for SS 211, lost in May 1944; and *Harder* (SS 568) for SS 257, lost in August 1944.—ED.



TWO TANGS—First USS *Tang* (SS 306) shown above sent 93,824 tons to bottom before she was sunk by own torpedo in 1944. *Tang* today carries on name.

Leading a Fast Life

SIR: I spent three years aboard *uss Hunt* (DD 674) during WW II and helped put her out of commission. Since that time, I've heard nothing about her. Is she still mothballed at San Diego? —G.A.L.

• *Hunt* mothballed? Far from it? She's been leading a fast life with other units in *DesLant* since you last heard of her. To bring you up-to-date and to let others know of *Hunt's* background, here's a rundown on her:

Her keel was laid 31 Mar 1943; she was launched 1 Aug 1943 and commissioned at Brooklyn, N. Y., 22 Sep 1943. After shakedown training at Bermuda, she transited the Panama Canal and reported to the Pacific Fleet 9 Dec 1943, where she started her role of operating as a screening ship for fast carrier task forces.

Her "baptism of fire" took place 30 Jan 1944 while bombarding Roi and adjacent islands in the Kwajalein Atoll. This was followed by taking part in carrier air strikes against Japanese shipping and installations at Truk. Then there were strikes against Palau Islands in the Carolines; Hollandia, New Guinea; Marcus and Wake Islands, and the occupation of the Marianas. During the First Battle of the Philippine Sea, she picked up 11 of our pilots and aircrewmen.

Hunt took part in the first carrier strikes against Okinawa and Formosa, and in the air attack on the night of 12-13 Oct 1944, she took 12 enemy planes under fire. This was followed by further strikes against the Philippines, the occupation of Iwo Jima and strikes against the Tokyo Bay area, Kyushu and Okinawa.

On 19 Mar 1945, while screening carriers during strikes against Kyushu and Nansei Shoto Islands, the carrier *uss Franklin* (CVS 13) was hit and severely damaged. *Hunt* immediately began picking up survivors from the crippled carrier and, by maneuvering the ship and employing her two small boats, rescued 429 officers and men during the morning.

14 Apr 1945 was a busy day for *Hunt*. She was part of a radar picket group supporting landings on Okinawa when an estimated 40 Japanese planes started a Kamikaze attack. One of these approached *Hunt* from the port bow at low altitude and hit the destroyer at deck level, passing between the mainmast and forward stack. The port wing sheared off on the mast, bending this tall steel post. The starboard wing sliced into the stack and stuck there with its big red meat-ball glaring down on the deck below. The pilot, with the fuselage of his plane and any bombs he carried, kept right on traveling into the water. *Hunt* remained on station and, within a half-hour shot down a plane making another attack. She re-

mained with carrier groups until 16 June when she received orders to return to the U. S., arriving 6 July. She was placed out of commission 19 Dec 1945, at San Diego.

She was recommissioned 31 Oct. 1951. Later, *Hunt* left San Diego, transited the Panama Canal and reported to *DesLant* 3 Mar 1952. Leaving Newport 1 Jun 1954, she made an around-the-world cruise which took her through the Panama Canal, to San Diego; Yokosuka, Japan; the Philippines; Hong Kong; Singapore; Colombo, Ceylon; Aden, Arabia; transited the Suez Canal, visited Naples, Italy; Barcelona, Spain, and returned to Newport 18 Dec 1954.

Since then she has taken part in convoy exercises, tours of the Mediterranean, midshipmen cruises and the International Naval Review. —Ed.

Weapon Able

SIR: Here's a picture taken by one of the crew members of *uss Walker* (DDE 517) during operations off Pearl Harbor, which I'm sure will be of interest to your readers.

The picture taken during a firing of the MK 108 Rocket Launcher (Weapon A) shows the rocket after it had traveled approximately 15 feet and is emerging from the launcher. The warhead and the smaller main body of the rocket can be seen above the flare shape blast deflector of the launcher. The stabilizing fins are still in guide tube.

The tremendous power of this ASW rocket propulsion is seen from the flame shooting high above the bridge. Sparks from burning propellant are also observed. This photo was snapped approximately one second after the firing key was closed. —E.W.B., LCDR., USN.

P.S. The picture was taken by Rich-



SHOW STOPPER—Unusual photo of Weapon Able was taken aboard *USS Walker* (DDE-517) by spare time photog R. L. Carpenter, SD1, USN.

ard L. Carpenter, SD1, USN, who, in his spare time, performs the chores of "official photographer for *Walker*." He has been commended by Commander Cruiser-Destroyer Force, U. S. Pacific Fleet, for his high performance and his assistance in aiding ships of the Force in their photographic work.

• It is an unusual picture — quite different from most Weapon Able shots we have received. And to photographer Carpenter, a Well Done! Keep up the good work and send us more of your pictures. —Ed.



BIG PAL—*USS Remey* (DD 688) pulls alongside carrier *USS Ranger* (CVA 61) while taking part in training exercises in Guantanamo Bay area of Caribbean.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying The Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four or more months in advance.

• **U. S. Naval Cargo Handling Battalion No. 1**—The third reunion is scheduled for 19, 20 and 21 September at the Henry Hudson Hotel, New York City. For further information, write to George J. Clark, Pleasant Ave., R. D. #2, Scarborough, Me.

• **3rd Special Seabees**—The eighth annual reunion will be held 11 and 12 July at the Hotel St. Paul, St. Paul, Minn. Write to R. L. Heutmaker, 56 E. George St., St. Paul 7, Minn.

• **93rd Seabees**—The ninth annual reunion is scheduled for 28, 29 and 30 August at the Aladdin Hotel, Kansas City, Mo. For further details, write to Dale Christy, 4204 East 69th St., Kansas City 30, Mo.

• **302nd Seabees**—The eleventh annual reunion will be held on 18, 19 and 20 July at the Hotel Harrisburger, Harrisburg, Pa. Write to Harry W. Price, Jr., 135 Third St., Lewistown, Pa.

• **579th Seabees**—A reunion is

scheduled for 30 August at the Marine's Memorial, San Francisco, Calif. For further information, write to Dale C. Ryman, 110 Alta Loma, Millbrae, Calif.

• **Shore Patrol B-21 Club**—The Twelfth annual reunion of the permanent Shore Patrol Stationed at Sampson Naval Training Center during World War II will be held on 11, 12 and 13 September at Bear Mountain, Peekskill, N. Y. For additional information, you may write to LT A. Vitola, Peekskill Police Department, Peekskill, N. Y.

• **uss Swanson (DD 443)**—A reunion is scheduled for 28-31 August, in New York City. For further details, write to William J. Clancey, 1407 New York Ave., Brooklyn, N. Y.

• **50th Seabees**—All former members who are interested in holding a reunion are invited to write to William Lamont, 6023 South Fairfield Ave., Chicago 29, Ill.

• **Early Submariners Organization**—Navymen who served in submarines before and during World War I who are interested in holding a reunion at the Submarine Base, New London, Conn., may write to Sylvester L. Cady, Apartment 302, 2235 St. Mary's Ave., Omaha 2, Nebr.

Uniforms in Ready Reserve

SIR: I am writing in regard to my husband's uniforms.

He was discharged about a year-and-a-half ago and is now in the Ready Reserve. At present he weighs about 50 pounds more than he did when he was released from active duty, so his uniforms look simply ridiculous on him.

His hat fits like a beanie. His pants come about four inches above his ankles and, on top of that, he can't even button them. His jumpers are so small they choke him and the sleeves are about three inches short at the wrists. Even his peacoat doesn't fit.

I've been told he has to keep these uniforms, regardless of how they fit. Since he has about eight complete outfits, this seems quite a waste.

Can't these clothes be turned in to the Navy or given to some charitable organization? They're now stored in a trunk and eventually they'll just mildew or rot away.—Mrs. P. T.

• *Evidently, the food you cook for your husband is a lot better than the information you have concerning his uniforms.*

There is no law or regulation which says your husband has to keep them. However, if he disposes of them before his term of obligated service expires, and is called back to active duty in the event of mobilization, he would have to replace them at his own expense. Except for that eventuality,

there isn't much point in hanging on to his old uniforms.

We would suggest that you turn these clothes over to the Boy Scouts of America, since the Sea Scouts are authorized to wear Navy Uniforms and could make good use of them. If, however, you decide to turn them over to an unauthorized agency, you should first remove all distinctive items, such as insignia and buttons, because it is illegal for unauthorized persons to wear distinctive items of the Navy uniform.

That's the long and short of it.—Ed.

Permanent Grades of TOs

SIR: BuPers Inst. 1430.7C states that temporary officers may be advanced within their permanent enlisted rating without quota limitations. It is my contention that this instruction means that after an enlisted man is appointed to a temporary warrant or commissioned grade he can take the examination for advancement and, if he passes, can be advanced by his commanding officer without quota limitations.

My question is concerned with the following example: An enlisted man accepts an appointment as temporary warrant officer from pay grade E-6. Does the commanding officer have to request authority from the Bureau to advance the man to E-7, if he doesn't take an examination after he accepted his appointment? Or, say the man did pass the E-7 examination before his

acceptance of appointment to warrant officer, but was not rated owing to quota limitations. Would his commanding officer have to request Bureau authority to advance the man to E-7.—D.L.S., YN1, usn.

• *You have misinterpreted the instruction concerning advancement of members serving as temporary officers, including temporary warrant officers, to CPOA. Examinations are not required and failure to be advanced as a result of earlier tests does not bear on these advancements.*

The only requirement that must be met before your CO advances you is that of minimum service. You are required to have spent 36 months in pay grade E-6 before being promoted. However, time served as E-6 plus time in temporary officer status may be counted.—Ed.

Barbs from a Bowhunter

SIR: In regard to your article on archery in the January '58 "Sideline Strategy" (page 45), I noticed a couple of errors.

First — In field archery sights on bows may be used. And those using sights shoot in a class referred to as "Free-Style." Rube Powell, a retired Navy chief, holds many National Field Archery records in this free-style division of field archery.

Second — It was stated that in field archery you shoot at targets up to 80 feet away. Come now, let's get this straight. It should be 80 yards not 80 feet.

Of course some people class hunting as a third type of archery. But hunting is actually the main interest of the field archer, with the range being designed to improve his hunting skill.

If it's not too much trouble, I certainly would appreciate it if you would correct these errors so people new to archery won't get the wrong idea.—R. E. Eilers, HMI, usn, President, Kaneohe Bowhunters, MCAS, Navy 990.

• *We're forced to admit that our Sports Editor missed the goal, or bull's eye, by at least 160 feet. Eighty yards is correct.*

We received some of our facts from the Norvair News, published by NAS Norfolk. Its reporter sought out a local archery enthusiast, who provided the information about no sights being used in field archery.

We can't take any sides on the matter, as free-style wasn't mentioned in the article in question. We'll leave that up to you and Norvair News.

Since Norfolk is quite a distance from Hawaii—presumably beyond the range of a missile launched from a bow—there isn't too much danger of bloodshed if the Kaneohe bowsmen shoot it out with the archers from Norfolk. So let's you and them shoot it out, huh? Preferably by means of a telegraphic match. We'll hold your coats.—Ed.

More on Sub Ports

SIR: The letters and editorial comments on them in the March issue certainly reflect considerable confusion on the subject of eyeports in submarines.

In one comment, you say "... eyeports, which are usually found on the bridge of all modern submarines..." Eyeports were in the conning tower, not the bridge, and there were usually three of them.

Modern submarines do *not* have eyeports. The dubious advantage of knowing exactly when decks were awash during diving was offset by the obvious danger of the eyeport cracking during a depth charge attack.

The portholes which appeared in your photo of *uss Cuttlefish* (SS 171) were in the forward bulkhead of the non-watertight bridge, above the conning tower. This area was all free flooding.

Eyeports were never of much use, but they did serve to startle a quartermaster once—no mean accomplishment. Just before collision between the old *uss Shark* (SS 174) and the equally old *uss Yorktown* (CV 5), the quartermaster looked out through the conning tower eyeport and shouted: "Migosh! Lookit them bilges!"—LCDR P. A. Smith, USN.

SIR: Sorry, but you still don't have the straight dope on portholes in submarines and you don't have to go back to the R and S boats to find it.

During the war I trained on the old *uss Pike* (SS 173) at New London. She had glass ports (but I suppose "deadlights" is the better term) set in the pressure hull of the conning tower. One of the routine reports on diving was "High ports under."

I was told that the reason for this was that originally there was a set of "low ports" similarly set in the pressure hull of the control room. Visibility through these ports was obviously limited, but I believe fish, seaweed and similar objects could occasionally be seen, just as through a periscope under water. I was also told that the "ports" had been removed from all other submarines but for some reason, were still on *Pike*.

Pike also had a number of other peculiarities for a Fleet boat. She had two fixed torpedo tubes which had been built into the bow outside the pressure hull as a war measure. The torpedoes in these tubes could not be "set" by the gyro setter and, consequently, could only be fired as straight shots.

The portholes pictured in *ALL HANDS* are merely in the free-flooding bridge structure and were common to all early subs. They were removed when the superstructures were cut down during the war to make a lower silhouette during night surface attacks. I believe you will find similar portholes again being



SOME DISH—Navy's 'flying saucer' radar research plane looks as though it has space visitor on back. 'Saucer' planes are developing new AEW gear.

installed in the newest submarines, although they are less conspicuous now. As I recall, *Nautilus* has a couple in the lower level of the sail, for use by the quartermaster when entering and leaving port.

I also spent a few months on *uss Cachalot* (SS 170), sister to *Cuttlefish* (SS 171). She still had direct drive engines which had to be reversed in order to back down. This was accomplished by coming to stop, shifting the camshafts with compressed air, and starting up again in reverse. Needless to say, approaching a pier too fast in this ship was a bit hairy.

Both *Pike* and *Cachalot* had no crew's dinette. Instead, bunks in the after battery were folded up and wooden tables rigged in their place. This may be one of the reasons why these old boats were not too desirable on 90-day war patrols.

They also had riveted hulls and *Pike*

was the last of the unwelded Fleet boats. The modern submariner doesn't know how good he has it.—LCDR John D. Alden, USN. (And not such an old-timer).

• *Let's recapitulate. We have learned that: ALL HANDS is (is not) wrong and we should (should not) apologize for being either (or both). Some submarines do (do not) have portholes, but sometimes they are (are not) called portholes. When they're not called portholes, they're called something else, if they have them. If they don't have them, they're not called portholes. Glad we managed to get this straightened out.*

Nevertheless, in spite of all the arduous research and recollection on the part of our readers, we're happy that the question arose. It's helped us fill in on odd corners of fact (fancy) concerning submarines—portholed and unportholed. And otherwise. Any other tough answers you want questioned?—Ed.

Origin of Portholes

SIR: One further word on "eyeports," "airports," or what-have-you to be found on submarines.

Without recourse to background material, I believe I am safe in saying that the apertures in question are known to real mariners as "deadlights," that is, "An opaque aperture for the admittance of light, but not capable of being opened." Despite the various shapes of the openings on the bridges of the various boats I've been on, I believe that they all bear the same name.

One further contribution: I recently ran across an interesting explanation for the term "porthole." The article I read stated that it was a practice of the older warships of the British Navy, the old square-

riggers that is, to open their lower deck gun ports in port while alongside a dock. In foul weather, water often washed in through these ports that were near the water line. Therefore, only the ports on the dock—or port—side were opened. Thus the term. It's as good an explanation as I've heard, and may be true.—R. S. Dwinell, EN1(SS), USN.

• *Glad you offered a possible origin of the term "porthole." We have tackled this subject several times but have never found enough concrete evidence to speak with any authority. It's probably one of those terms whose source is forever lost through time's attrition. But it's fun to speculate and, as you say, your explanation is as good as any.—Ed*

Electing Home Address

SIR: Since my 20 years' service is rapidly coming to a close, I have submitted my application for transfer to the U. S. Naval Fleet Reserve and release from active duty. This has been approved by the Chief of Naval Personnel.

Joint Travel Regulations (Para. 4158) authorizes one year from date of release from active duty as the deadline date for performing the travel by me and my dependents, and shipment of household effects. However, no mention is made of the deadline date for electing my home address. Am I permitted to elect my home address within the one-year period after transfer to the Fleet Reserve? Or must I elect my home address at the date of separation?

Can you tell me the latest date I am permitted to elect my permanent address for retirement purposes which would allow me to obtain transportation for me and my dependents at government expense, and shipment of my household effects at government expense, to the elected permanent address from my current temporary address (point of release from active duty.)? —P.T.H., PNC, USN.

• *There is no requirement that a home be selected within any specified period of time. There is a requirement, however, that travel be performed within a one-year period following retirement, (including transfer to the Fleet Reserve or Fleet Marine Corps Reserve). Conceivably, a member and his dependents could perform travel at own expense to a temporary location within the one-year period, and before the expiration of the one-year period, decide to select that temporary location as his permanent home. Upon making the appropriate certification on the retirement or transfer orders as to the place selected as home, payment of travel allowances would be in order.*—Ed.

Honors to Arizona

SIR: About the discussion concerning passing honors to *Arizona*:

We in the Signal Tower are in a position to observe *Arizona* all the time. To the best of our knowledge, ships passing her *do* render honors. It has been noticed that certain merchant vessels while en route to the Supply Base here at Pearl render honors by dipping their ensigns for a short time while passing her. Colors are held on her every day, just as though she were in commission.

Just thought we'd let all hands know that their memorial is not forgotten.—Henry L. Tobias, SM2, and the Signal Gang, Signal Tower, Pearl Harbor, T. H.

You Made the Right Choice

SIR: Upon receipt of rotation data cards for Segment I, I reported to the personnel office to submit my choices of duty. I asked what would happen if a man did not desire shore duty in continental United States and preferred to submit a choice for MAAG or mission duty. He told me, as I already knew, that I was not eligible to submit such a choice of duty. I then listed my choices of duty in continental United States.

Recently, a PAMI listing of rotation data cards submitted from this command under Segments I & III was received and, much to my surprise and amazement, I noted several personnel listed with such choices of duty as England, France, Germany, Denmark (Codes 2 and 8). I questioned this same PN1 as to how this was possible in the case of these men especially after I had brought up the question and had been told I was not eligible. His answer

was that he had informed the men in question that they were not eligible to make such choices but rather than argue with them, he permitted them to list their choices as mentioned above.

What I cannot understand is how these cards were processed by PAMI ComServLant and not returned for correct submission. Furthermore, the forwarding letter of these listings stated that any errors were to be promptly reported to the Bureaus which this command has not done. I am certain that the Bureau will catch this matter and rectify it but then again, as ComServLant did not do so, it is possible that the Bureau may not and these certain few who did not comply with the instruction through the indifference of the personnel office of this command may wind up getting another tour of overseas shore duty or MAAG or mission duty while the remainder of us on the list who complied and of whom many would have preferred another tour overseas will have to go to shore duty in continental United States. It's enough to make me want to turn in my suit and request transfer to the Fleet Reserve.—P. F., YNC, USN.

• *Aw, c'mon now. Duty in continental United States isn't that bad. You've probably read where they now have television in the States—some of the commercials are real good. Most of the natives speak some form of English.*

Furthermore, assignments to duty at BuPers-controlled overseas activities are still made in accordance with BuPers Inst. 1306.62A. Personnel stationed at overseas activities or non-rotated ships overseas are not eligible for transfer to a BuPers-controlled overseas activity. And you can rest assured that none will be transferred to such duty by the MAAG and Mission Detailing Section regardless of choices as listed on Sea-vey Data Cards.—Ed.

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The Salty Touch

SIR: Your March cover, showing C. L. Foushee, CDR, USN, and the article about this Navyman who came up the ranks from seaman, on page 27 of the same issue, brought back memories for me. One of the most vivid of them was an incident that took place shortly after *uss Philadelphia* (CL 41) was commissioned back in 1937.

The then Chief Boatswain Foushee assembled the R Division for personnel inspection while underway. The weather being fine, quarters were piped for fair weather parade.

Suddenly, we shipped a fine sea aboard, and the men of the division, mindful of their best whites, scattered like quail.

BOSN Foushee never batted an eyelash and stood firm. As the water streamed down his face, he regarded this latest antic of the modern Navy with a look of disdain that I have never forgotten.—F. G. A., DCWC, USN (Ret.).

• *As we said, CDR Foushee has "proved pretty conclusively that he 'had what it took to stick it out," despite the admonition to the contrary which he received when he joined up 43 years ago.*—Ed.

Safety First Last

SIR: Your front cover (February issue) reveals one discrepancy which will cause every electrician and IC electrician to wince.

I refer to the dangling cap to the outlet box. The negligent practice of leaving outlets uncapped—particularly sound-powered telephone outlets—has caused the aforementioned men many hours of needless work for years.—CDR W. E. Fleshman, USN, XO, NATTC Jacksonville, Fla.

• *Right you are. Sorry.*—Ed.

SIR: Safety first, is it? Or last? Your front cover display of February makes it difficult to convince personnel of the importance of safety goggles.—J. W. B., USN.

• *Right. Sorry.*—Ed.

SIR: The front cover of February ALL HANDS shows an open outlet box on the weather deck of a ship. Furthermore, a sailor is shown hammering metal just below the open outlet box. Metal banging against metal can easily produce slivers that could fly into the opening of the outlet, causing a short circuit. Furthermore, damage could be incurred through moisture or corrosion.

The unsafe condition mentioned above is in direct contrast to the teachings of shipboard safety. Such unsafe conditions should not be advertised. Remember: A safe crew means a safe ship.—S. R. Cowell, USNS *General H. F. Hodges* (T-AP 144).

• *Right. Sorry.*—Ed.

SIR: We can't help but wonder how many man days have been lost in the



ALL DECKED OUT—Seaplane tender *USS Currituck* (AV 7) rides at anchor in full dress during civic ceremony. *Currituck* makes her home port at Norfolk, Va.

sick bay by Navymen like the "Iron Man" on the February cover of ALL HANDS.

Is that a bloody thumb along with the mangled middle finger on his left hand? Our guess is, if he doesn't hit himself again, he'll stick his finger into the power outlet someone so carelessly left open.—CPO Quarters, *uss Energy* (MSO 436).

• *Okay, okay. So all right, yet. We have no one to blame but ourselves—we took the picture. We'll be careful of posed shots hereafter.*—Ed.

SIR: In regard to your cover on the February issue of ALL HANDS: All very nice, but I would like to suggest that it might have been more accurate to have shown Fireman Carroll wearing protective goggles. If such protective measures are not being observed on board *uss Hugh Purvis* (DD 709), it is possible that they are not being observed at other duty stations in the Navy. If this is true, it might be well to take a "stitch in time" and circulate a directive concerning the use of goggles and other proper protective equipment which is provided for various hazardous tasks.—J. H. Nelson, LT, MC, USNR.

SIR: Your photographer for the front cover of the February issue should hide his head in shame. Of all the good men and material available for an interesting cover, he selects a fouled-up FN beating on a piece of steel flat bar with, of all things, a blacksmith's chisel and using a vise for an anvil.

I'm sure that the Bureau of Naval Personnel, who also publishes the Training Bulletin, as well as the instructors at BuPers' schools will not be happy at this example of how not to do it.—D. F. Drodgy, ShipRepTech, WO/W1.

• *Now look, shipmates, we said we're sorry and we are. Let's forget the whole thing if you can't forgive us. Okay?*

However, before we drop the subject forever (we hope) there are a couple of items we'd like to mention. First of all, it's not fair that Carroll and Purvis should take the rap for this. Our man, who still shudders at the words "front

cover," told Carroll to pick up a piece of iron and look as though he were working. Carroll very politely posed to help the ALL HANDS photog. Those in authority aboard Hugh Purvis had no opportunity to review the photo before it was published.

Another point we found interesting was the wide range of protest the photo inspired. Some found the open electrical outlet shocking; others took a dim view of Carroll's technique. Many, we were happy to note, were interested in the safety (or lack of it) features. Others, we were equally happy to note, were concerned about the example it might set.

Although some of our correspondents were somewhat rough on poor Carroll who, after all, was simply doing as he was told, they seem to have come out of the incident better than we did. One reassuring feature—people do look at the magazine.—Ed.

More on Conestoga

SIR: One further matter of possible interest in regard to the tug *uss Conestoga*: The tug was originally owned by a Pennsylvania railroad and coal company and towed large coal barges along the coast from Philadelphia to Boston. I remember her very well because at the close of World War I, I was transferred to Director of Tugs, Hampton Roads, when *Conestoga* arrived from the Azores.

I was ordered to report on board *Conestoga* to pilot her from Hampton Roads to the Portsmouth Navy Yard. I was the only one familiar with the channel of the Elizabeth River which had a large amount of traffic in those days, so I took her up the river.

Another chief and I were standing watch as shipkeepers for some little time. If I had had more time on my fourth enlistment, I probably would have sailed with her and, perhaps, would have accompanied her on her last trip.—Charles Conner, CBM, USN (Ret.).

• *Thanks, chief, for further details on one of our favorite mysteries.*—Ed.



HAPPY DAY—Crew members dressed like Arabs wave greetings as ship arrives. Right: Dependents board Duxbury Bay.

White-Robed Sailors Arrive from the Persian Gulf

RECENTLY A STRANGE sight in the shape of a gleaming white ship with robed and turban-attired men waving from the flying bridge made its way into Norfolk harbor.

However, to the expectant people who crowded pier number five there was nothing unusual about this arrival. They knew it was *USS Duxbury Bay* (AVP 38) returning from a six-month tour of duty in the Persian

Gulf where she had served as flagship for Commander Middle East Force. To these persons who waited on the pier holding "welcome home" signs the ship was a familiar sight for they were the friends and relatives of *Duxbury's* crew. The four men dressed Arabian style, who waved from the flying bridge, were crew members, happy to be home again and eager to show their family souvenirs purchased in faraway places.

Although the white paint of *Duxbury Bay* contrasted sharply with the conventional Navy gray of the other ships in port, it was old hat to her and other ships that have served as flagship in the hot waters of the Middle East. The paint job, air conditioning throughout, as well as special uniforms, were designed to help Navy-men beat the heat in those far-off waters.

This was the ninth Persian Gulf trip for *Duxbury* since 1950. This time she made new friends in Ceylon when her crew joined other Navy ships in bringing relief supplies to that country stricken by floods.

Taking over the duties of flagship for Commander Middle East Force was *uss Valcour* (AVP 55).



SMALL FRY dependents of *Duxbury's* crew spell out their welcome. Above: *Duxbury* eases into pier at Norfolk.



Take Me to Your Leader

For your information, the Navy is starting a leadership program. In a sense, it broadens the character guidance program of which you have heard. On the other hand, it applies to "hup-toop-free-fow" and to "start your brooms." It applies to handling a ship's boat, to servicing the guns, to scanning with radar.

It applies to the fighting man (or the man ready, able, willing to fight—if you prefer). It applies to leading and being led. Perhaps it most closely applies to the petty officer, the CPO, the junior officer.

The leads on leadership on this and the following two pages come from interviewing, reading, talking, listening and collecting material. Every man, it's pointed out, is a leader. But some of us can improve.

For example, we were briefed on the program by an ex-POW. What he had to say opened our eyes. Inter-reliance; self-leadership; strength of character—these were the terms he used. He used them to describe the men who had survived in POW camps. It was an object lesson to us.

We're giving you some of his ideas, together with the principles of senior officers, past and present. A new manual, Moral Leadership (NavPers 15890), tells more about the program. You take it from there.

ARE YOU A LEADER?

"Who me?" you ask. . . . "I'm the junior chief among 12 other CPOs in the division." . . . "An ensign fresh out of college." . . . "I'm only a PO3—low man on the totem pole."

No matter what your answer may be, you're still in a position which requires leadership. Every Navyman—from the top ranking admiral on down—has that responsibility. But just what is leadership?

The centerspread on the following pages—which has been endorsed by the Navy's top men—summarizes leadership. You'll notice that in the Navy, as well as in every walk of life, you have leaders and you have followers. Leadership is simply the art of influencing human behavior. At the Naval Academy—where many of our naval leaders are molded—leadership is defined as the art of accomplishing your mission by gaining the respect, obedience and loyal cooperation of your men.

Sounds impressive, but what does it all mean?

In everyday words, it simply means the ability to handle men. That's where you come into the picture.

A PO3 or a senior CPO, a division commander or the head of a department, a commanding officer or a task force commander—each, by virtue of his rank or rating and assignment, is required to exercise a certain amount of authority within the framework of the chain of command.

As every Navyman knows, that chain connects each crew member with the skipper of his ship, the division, squadron, type and Fleet commanders and on up to the Chief of Naval Operations. Your individual job may cover just a small portion of a link in that chain, but you still lead men and operations.

No one man runs the Navy. This is done by many men like yourself—each with a higher or lower degree of authority. Although you have your own "command," you do not operate it independently. It is a part of a team operation which includes all other "commands." This chain of "commands" forms a chain of leadership.

The Navy can't function without you—any more than it can function without its senior admirals.

Just how you go about fulfilling your leadership responsibilities, of course, depends upon the situation, the nature of your "command" and the number of men under you. But regardless of the situation, the leadership principles—the rules, characteristics, traits or policies—which you apply in controlling or guiding the actions of your men, would be the same.

Some of the more important leadership principles and techniques are illustrated on the next two pages. You can see how you stack up as a leader.

Your responsibilities as a leader are twofold—the accomplishment of your assigned duties or mission, and your duty to your men. In other words—getting your job done and taking care of your men.

Getting the job done is where knowledge of your job enters the leadership picture. By knowing your duties thoroughly, you're able to *show* your men what to do, as well as *tell* them.

No individual—regardless of his rank or rating—is in a position to undertake any leadership responsibilities unless he knows what his job is and the part he is to play in getting it done. By the same token, he's expected to keep his men informed and explain to them why a task must be accomplished and the part each of them will play in doing it.

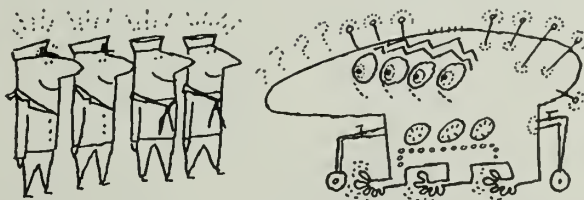
As a leader, the Navyman makes this his first duty—briefing, instructing and training his men to the end that they will get the job done.

The second most important responsibility of a leader is considering the welfare of his men. When you know each of your men and their individual differences, you're able to assign them to the jobs for which they are best fitted—and they feel that they share in the responsibility for the work. Leadership

means having a sincere interest in everything affecting the men you're responsible for—their gear, their working conditions, their well-being (on duty and off). When a man has a personal problem that the Navy can help him to handle, it helps to know about it. Looking out for the welfare of your men earns their support and cooperation.

A leader (it says here, and we'll have to admit it's true) has a moral responsibility which is more than knowing right from wrong. He sets the standards for his men, because he knows their actions will be governed by his actions. This applies to loyalty, both to seniors and to your ship. It applies to personal appearance and personal conduct—on the job and ashore.

Here's one conclusion that you probably have drawn by now: A good leader is successful because his men *want* to follow him. You said it, boss.



Every Navyman A LEADER



WHO ME?

LEADERSHIP IS THE ABILITY TO INFLUENCE OTHERS

sometimes THE WRONG WAY OR sometimes THE RIGHT WAY



IT'S AN ART IT'S A SKILL TOO

FOLLOW THE LEADER

YOUR JOB: K=P

KNOWLEDGE IS POWER. Know how your job and unit fit in with other activities aboard ship. Keep studying. Be a source of up-to-the-minute information. Keep your men posted on what the ship is doing, and their part in the operation.



YOU: the inner man

SELF APPRAISAL—When you know yourself you can make improvements. Don't let your weak points get you down. Make the most of your strong points—strengthen the weak ones. Have the courage to say you "don't know" and find someone who does. A man needs to know his job to make quick decisions. Stick by your decisions once you make them.



PASSING THE WORD



KNOW THE NAVY WAY—give orders correctly. Give orders to men in charge, not the group. Follow chain of command—up and down. Insist on attention. Avoid bossy attitude. Show confidence in your ability. Don't waste words—be definite, clear, concise and use simple language. Don't use senior's name to add weight to your order. Don't issue an order you don't intend to enforce.



PROFANITY IS CONTAGIOUS

COOPERATION works both ways



GIVE FULL CREDIT to men when and where credit is due. Accept responsibility for mistakes made by your men. Let your men know you appreciate their good work and see that others do too. Earn the respect of your men by being courteous to subordinates as well as superiors. Don't threaten punishment to make orders more effective. Don't think up jobs just to keep men busy.



KNOW-HOW in giving instructions

KNOW THE "KNOW-HOW" of explaining to others why the job must be done, the Navy's mission, the mission of your ship and the immediate tasks at hand. It is not enough to be able to do the job yourself. Be able to show what you want done as well as explain what you want done. Encourage men in difficult jobs. Build a sense of teamwork by using group action to speed accomplishment. Ask for questions and stimulate discussion.



WHEN THINGS GO WRONG the

BEFORE you give that blast be sure the man knows why he is being "chewed out." Discipline does not necessarily mean punishment. Punish as a last resort. Avoid making criticism a personal thing. Bowl him out in private—not in front of people he works with.

I will be good
I will be good

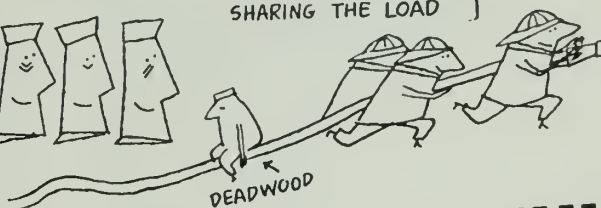


Every Navyman A FOLLOWER too

WHO ME?



GOOD FOLLOWERS } LEADERS
SHARING THE LOAD



WHO'S WHO: man to man

KNOW YOUR MEN and treat them as individuals. Find out their abilities, capacities, endurance. Show an interest in their health, their personal problems, leisure-time activities—an understanding of your men will help you to keep things running smoothly. If you don't know your men—your men won't know you.



THE MEN you work for

TRY TO UNDERSTAND your boss's problems. Put yourself in his shoes. Respect his position and training. Let him know your full range of experience and talents so that you can do your own job better. Assume responsibility for the work you do, and know how to delegate work to others.



RECOGNITION: what's in it for me you

COMPLIMENT IN PUBLIC. Don't overflatter. If you are satisfied with their work, say so. Spot poor work quickly—praise good work equally as fast. Express interest in every man's ideas even if you disagree. Grant favors when deserved. Encourage sense of responsibility by emphasizing importance of a job well done. Look after your men—be interested in their promotion. Be proud of your crew.



GO TO BAT for your men

BE GENUINELY INTERESTED in your men's leisure-time activities, their quarters, their health, safety, and family. Assure them that they can turn to you first when in trouble and then—came through for them! Insist on the best possible facilities for your men. Be a good listener when it comes to personal problems and really try to help rather than pass the buck. Don't pick on one man. Help them to prepare for advancement.



There's a right way to right them

Whether action was intentional or accidental. Get the whole story. Be fair. Never act in anger. Use common sense. Know the man's past record. In the benefit of the doubt. Take correct action. Reason for discipline.



"Discipline is vital in getting order during action by forming the habit of teamwork. Discipline is not punishment but saves lives in an emergency."

AYE SIR

AYE SIR

CHAIN REACTION

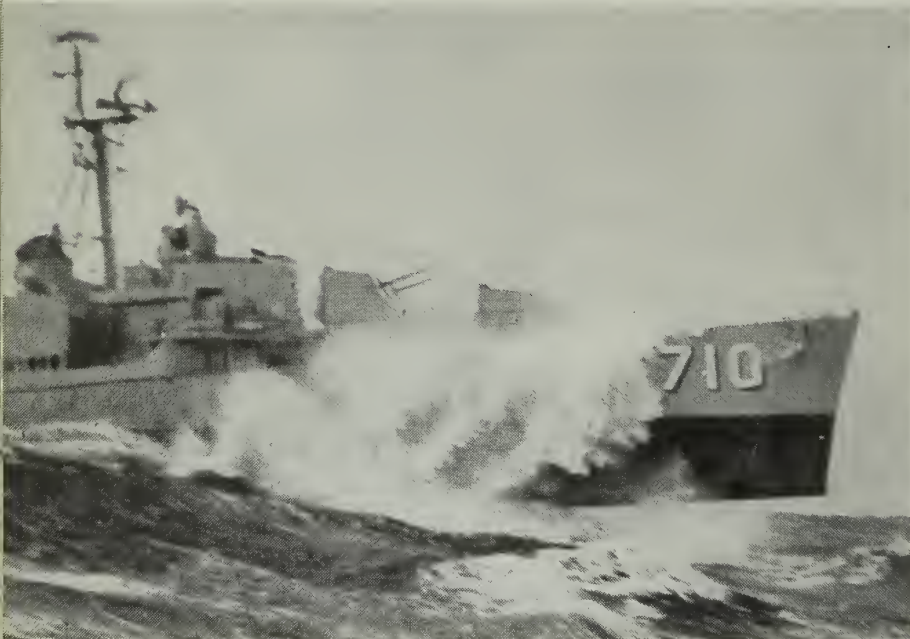
FOLLOW THE RULES yourself. Insist on chain of command. This good habit works up and down the ladder. Don't confuse popularity with respect. Be honest with your men. Know what's going on around you. Be consistent in your demands. Reward worthwhile action.



KNOCK OFF THAT SMOKIN'



★★★★★ TODAY'S NAVY ★★★★★



HIGH SEAS—USS *Gearing* (DD 710) makes an attempt to refuel from USS *Salamonie* (AO26) during which time crew member was washed overboard.

Now You Can Learn the Tango

A slick new Enlisted Men's Club has come to life at Rota, Spain.

The club is the first Navy-built social center to become available. Officer and Chief Petty Officer Clubs are still under construction.

Anthony T. San Fillipo, RM1, cut the red ribbon stretched across the club's main entrance—signalling the club was in commission. San Fillipo was the senior sailor present.

Dancing crowned the opening day festivities. A mammoth high-fidelity juke box twirled out music ranging from hill-billy waltzes to rock 'n roll, and spiced the offerings with a few lively Spanish numbers. Navy-

men and Marines who brought Spanish *senoritas* introduced their dates to American culinary favorites such as hot dogs, cheeseburgers, steak and eggs.

Designed to match the prevailing architecture of Spain's Andalucia region, the club building is a classically squarish structure of white stucco, featuring two patio-like terrace sections.

Tentative future plans for the club include frequent informal and some formal dances, dinner and cocktail parties, entertainment by Europe-circuiting bands and floor-show troupes, and exhibitions of the famous Andalucian flamenco dancing.

YESTERDAY'S NAVY



On 2 Jun 1941 the Navy's first escort carrier, USS *Long Island* (AVG 1), was commissioned at Newport News, Va. On 8 Jun 1880 Congress authorized the President to appoint a Judge-Advocate General of the Navy. On 9 Jun 1942 the Naval Operating Base at Kodiak, Alaska, was established. On 11 Jun 1944 U. S. battleships off Normandy gave gunfire support to Army forces 10 miles inland at Carentan, France. On 21 Jun 1866 Congress authorized the establishment of the Hydrographic Office. On 19 Jun 1864 USS *Kearsarge* sank the Confederate raider *Alabama* off Cherbourg, France.

To the Rescue

A sailor who jumped overboard into mountainous 60-foot waves to rescue a man washed over the side from a destroyer has been awarded the Navy and Marine Corps Medal.

The medal was presented to Lawrence W. Beckhaus, GM2, usn, by RADM John C. Daniel, usn, then Commander, Destroyer Force, Atlantic Fleet, in ceremonies aboard USS *Salamonie* (AO 26). The award, one of the highest peacetime awards given in the Navy, was presented to Beckhaus for his daring rescue of George D. Schack, SN, usn, who was swept overboard from the destroyer USS *Gearing* (DD 710).

The incident occurred while *Salamonie* was performing emergency refueling of *Gearing* off the coast of Spain during an Atlantic storm. Schack, engaged in jettisoning loose gear to lighten the destroyer, in danger owing to heavy weather and low fuel, was tossed overboard when a gigantic wave broke over *Gearing*.

Salamonie was approximately 1000 yards astern of *Gearing* when it received a man overboard message by flashing light and voice radio circuit. Minutes later Schack was sighted on the port bow. The oiler maneuvered to bring him alongside, but was unable to turn sharply enough to get the victim to leeward, and drifted away from the tiring man.

Salamonie turned into the wind for a second approach and was successfully maneuvered to the windward side of the man. Meanwhile, more than 30 lookouts kept Schack in sight.

The heavy seas and 60-knot winds made it impossible to lower a lifeboat. Beckhaus, with the permission of his commanding officer, dived over the side. After a 10-minute swim the gunner's mate reached the exhausted but still conscious seaman.

With the tanker rolling as much as 25 degrees in the trough, *Salamonie's* crew heaved the line in. Both men came on board simultaneously as the oiler took a huge wave that swamped the well deck.

Schack was found uninjured, but was sent to sick bay for shock treat-



HELPING HANDS—F. D. Pensinger, FN, USN, (left) receives Navy and Marine Corps Medal for rescue of serviceman. Navy diver Jerry Ard received commendation by CO for attempt to rescue shipmate from bottom of harbor.

ment and Beckhaus returned to duty after prescription by the commanding officer. Schack was later returned to *Gearing* by high line transfer.

RADM Daniel in presenting the medal commented: "In peacetime, operations are continually exposed to extra hazardous conditions. Eight gallant destroyermen were lost overboard this year and but for the outstanding heroism of gunner's mate Lawrence Beckhaus, this number might have been nine.

"To destroyer sailors, weather is always an enemy. To a destroyer low on fuel, the maddened sea can mean loss of the ship and death for all. It is our fervent hope that the construction of the nuclear-powered guided missile destroyer, free from its de-

pendence on oil, will lessen these hazards.

"It is in this circumstance that a heroic man of the gallant *Salamonie* volunteered to hazard his life for that of another sailor. On behalf of the Secretary of the Navy, it gives me the greatest pleasure to make this citation."

Standing before Schack's parents and Beckhaus' wife and four children, RADM Daniel pinned the medal on and read the citation which concluded: "By his outstanding courage, initiative and determined efforts throughout, Beckhaus upheld the highest traditions of the United States Naval Service. Signed Thomas S. Gates, Secretary of the Navy."

RADM Daniel shook hands with Beckhaus and concluded, "You have my gratitude and that of every destroyerman."

More Helping Hands

"Giving the other guy a hand" won't be found in many Navymen's job code, but nevertheless they manage to get around to it with reassuring frequency. Consider, for example:

Frederick D. Pensinger, FN, USN, of USS *Mullany* (DD 528), who was awarded the Navy and Marine Corps Medal for rescuing a fellow serviceman from drowning in San Diego Bay.

Last year, as a liberty party returned to the ship after midnight in stormy weather, Pensinger saw two men fall overboard as they climbed from a water taxi. He jumped in after the men, who seemed to be poor swimmers. In spite of the dark-

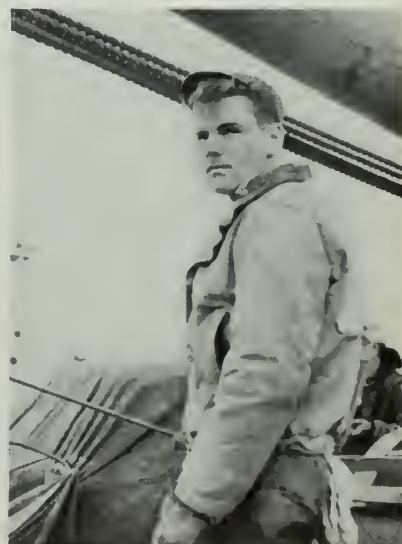
ness and the swift current running, Pensinger was able to reach and save one man. The rescued man stated in an interview that the other victim had expended himself and was unconscious before he could be reached.

Then there is Jerry Ard, SN, USN, a qualified Navy diver, who was commended by his commanding officer aboard the heavy cruiser USS *Rochester* (CA 124) for his attempt to save the life of a drowning shipmate.

It was again night and a light rain drizzled over Keelung Harbor, Taiwan, when the Officer of the Deck sounded "man overboard!" Ard was rushed to the scene, hurriedly fitted out with a lightweight spider-



RESCUED—G. D. Schack, SN, USN, washed overboard by large wave while jettisoning ship's loose gear.



RESCUER — L. W. Beckhaus, GM2, USN, received Navy and Marine Corps Medal for rescue in high seas.

TODAY'S NAVY

harness diver's mask operating on an auxiliary compressed air hose, and slipped into the floodlit green strip of water between ship and pier where the man was seen to go down.

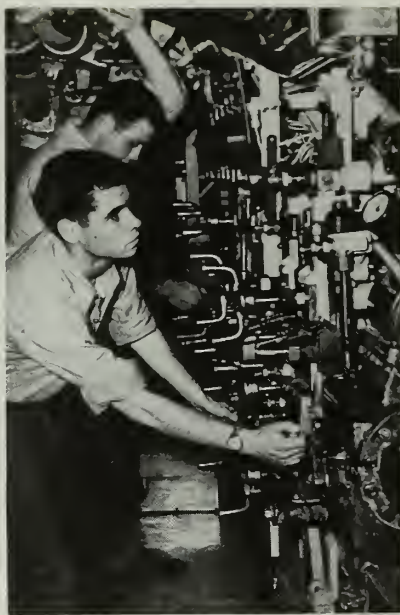
Underwater, Ard worked in total darkness at a depth of 33 feet, following a systematic search pattern over the muddy, debris-cluttered harbor bottom, often cutting his arms and legs. His commendation noted that he made the dive "without benefit of protective clothing and with risk of serious bodily injury to himself in contaminated waters."

Fifteen minutes later, Ard surfaced with the body of his shipmate.

Now a second class deep-sea diver, Ard has been interested in diving since he was six, when he saw a motion picture about it. He began to learn the art in earnest last March in San Diego when he took a ten-week course at the Navy training school. He has since performed every type of dive except bell and helium-oxygen descent, spending much of his liberty time increasing his special skill.

Divingest Submarine

uss Spikefish (SS 404) claims to be the Navy's divingest submarine. The reason: more than 9000 dives. This is almost 1500 more than her nearest rival, says *Spikefish*.



BALLAST TANKS empty, 'U-drive-it' Reservists secure air blower completing final stage of sub's surfacing.

The New London-based submarine recorded her 9000th dive during operations in the North Atlantic while conducting ASW exercises with *HMCS Lanark*.

Spikefish is commanded by LCDR Harry H. Caldwell, USN, and is assigned to Submarine Squadron Two.



BACK HOME—Destroyerman Bob Shamblin of *USS Brough* (DE 148) greets family as ship returns to Newport, R. I., after six months cruise to Antarctica.

Visits Vice Versa

Men of *uss Saint Paul* (CA 73) have learned that a lot of good will can be created in one week by a U. S. Navy ship in a foreign port when all hands turn to. It can be fun, too.

The crew of the heavy cruiser were hosts to nearly 10,000 visitors during a stay in Osaka, Japan's second largest city.

At various times during the week, a "Welcome aboard!" was extended to 4000 grade school children, 200 children from a local orphanage, 20 newspaper men, 75 Japanese navy personnel, 1800 Japanese army and air force personnel, and some 4500 Osaka citizens.

In addition, some 200 guests attended an official ceremony aboard the cruiser.

As the visitors came aboard, they were split into small groups and given guided tours of the ship. The children were treated to ice cream, cake and cartoon movies. The Seventh Fleet Band gave four performances during the week.

Sports also provided an interchange of culture, as the Osaka police put on a demonstration of judo and kendo aboard the flagship for the *Saint Paul* crew. The basketball team dropped the Osaka Mita Club 79-44, and the baseball squad stopped the Osaka Harbor team 9-8 and split a doubleheader with the Osaka Friends.

Many *Saint Paul* sailors took advantage of guided tours. Palaces, shrines, pagodas and temples in the Osaka, Kyoto and Nara districts kept the sailors and their cameras busy recording the remains of an ancient civilization.

All-Service Airfield

The airfield at Naval Air Station, New Orleans, La., has been dedicated as Alvin Callender Field in ceremonies on 26 April 1958.

It is the first airfield originally planned and constructed as a joint operating field for all the services. The airfield will perpetuate the memory of the New Orleans aviator, Alvin Andrew Callender, who lost his life in aerial combat during World War I as a member of the Royal Flying Corps.

Units of the Air National Guard, Air Force Reserve, Marine Air Reserve, Coast Guard, and naval aircraft will use the new field.



LONG TIME—Edson H. Peek, ADC, put on civilian clothes after retiring from a Navy career of 30 continuous years.

Navy Notables

Over the past few months, many men in the Navy have retired, shipped over and received Good Conduct awards. In this group were five men whose total time in the Navy, if stretched out continuously, would date back long before the Navy Department was organized or the first ships of the Continental Navy went to sea to defend our country.

One of the more notable "notables" retiring was Chief Boatswain Patrick J. (Pappy) Byrne who left the Navy 31 March after a 40-year career in which he flew more than 140 types of planes and logged more than 22,600 hours in the air.

The 62-year-old Byrne, whose name has become a legend among naval aviators, is regarded as a pioneer in seaplane aviation. He helped establish almost every Navy seaplane base in the world.

The venerable Byrne's days in the air began even before he entered the Navy. In 1915 he was flying a Burgess-Dunne seaplane with the late General Howard S. Borden of Rumson, N. J. On 14 Dec 1917, Byrne joined the Navy, kept his hand in flying and, in October 1920, was designated Naval Aviation Pilot #10.

Mr. Byrne fondly recalls the early years of flying. As one of the pioneers he first flew in planes which had nothing like the maze of complicated gauges and dials that confront the aviator of today. Back in those times there was merely an oil pressure gauge.

Chief Boatswain Byrne (LCDR,

Ret.), in those early days of aviation, used a string tied to the bow of the plane to tell whether the plane was slipping, skidding or flying straight ahead. He judged his airspeed by the singing of the plane's wires. An ardent believer in "the seat of the pants" theory of flight, Byrne believes that flying in that era required a natural inclination on the part of the pilot. "Today they say we were crazy," said Byrne. "But that was the ONLY way to fly in those first years." Instead of a radio, telegrams were used to notify an airfield impending arrival of an "aeroplane."

In place of radio beacons at night and overcast days, they used their noses. He remembers more than once flying down the east coast at about 200 feet knowing only by the smell of coffee that he was over Brooklyn, and only by the odor of fish packing



STRAIGHT THROUGH—Harry Morris, TMC, who first went to sea in *Alliance* retired after 55 years straight service.

plants that he was over the Delaware coast. The fumes of sulphuric acid from paper mills were a welcome smell for they signified the end of the flight at Charleston, S. C.

Another air-minded gentleman has joined the ranks of the retired after completing 30 years on continuous duty. He is Edson H. Peek, ADC, who recalls the days when pilots were so rare that part of a petty officer's duties was to taxi the aircraft to the point of take-off. In those days the pilot was so important that his time could not be wasted taxiing.

Enlisting when he was 17, Peek completed boot training and was assigned to the battleship *USS New Mexico* (BB 40) as a mechanic on the early amphibian OL-6. Later he was assigned to Pensacola where, as an aviation machinist's mate second



'PAPPY' PILOT—Patrick J. (Pappy) Byrne, retired after 40 years with more than 22,600 hours of flying time.

class, he assisted with the making of many a famous pilot-to-be.

By 1936 he had joined the famous fighter outfit known as the "Hi Hat Squadron." This outfit was equipped with sleek bi-planes which were then the pride of the Navy.

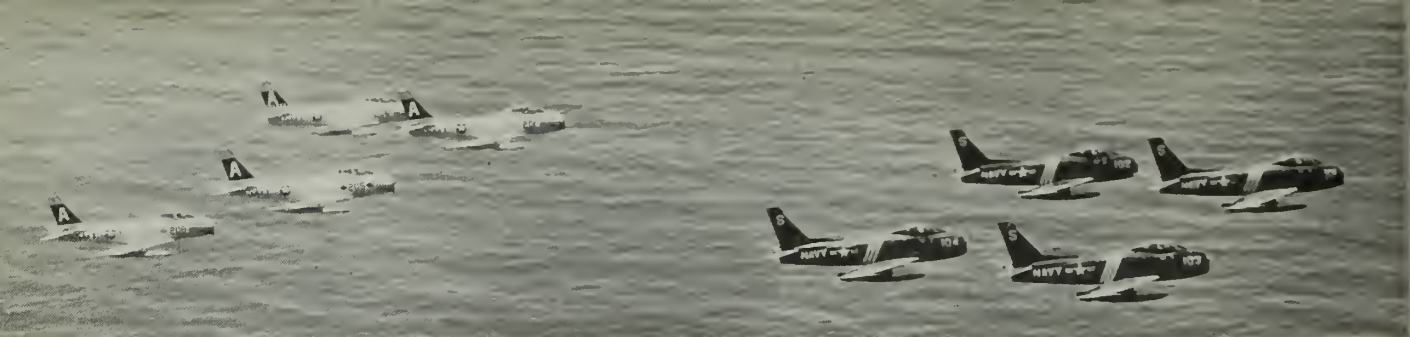
Times have changed but Chief Peek still has vivid recollections of those days that marked the beginning of "Air-a-daes and Atoms."

Another retiree (and still another "Pappy") is Harry "Pappy" Morris, TMC, who tossed in the towel after serving 55 years of continuous active Navy service. He shares with FADM William D. Leahy, the longest continuous active naval service on record.

Chief Morris joined the Navy when he was 14 in April 1903, and served



RE-UPS AGAIN—Chief Quartermaster L. C. Corning of DesLant re-enlisted for two years to make career even 40.



FLYING LOW—Formation of carrier based Fury jets skim over the water during operations at sea.

in 41 different ships including cruisers, battleships, destroyers, aircraft carriers, and submarines. After receiving his initial instruction at the Newport, R. I., training station in 1903, Chief Morris boarded the frigate *Alliance*, a sister ship of *Constitution* and *Constellation* of Revolutionary War fame.

An accomplished diver, he was sent to Pearl Harbor shortly after the Japanese attack which initiated our entry into World War II, to help raise the battleships *USS West Virginia* (BB 48) and *California* (BB 44).

Since WW II, Morris has been stationed in San Diego. While assigned to duty with the shore patrol, he saw the need for a court liaison representative who could serve as a link between the Navy and civil law enforcement bodies of the area. Details regarding procedures to be followed were worked out with the cooperation of the Eleventh Naval District Director of Discipline office and with judges and other civil authorities.

The 70-year-old Morris is one of the very few men who is still entitled to wear the figure-of-eight knot insignia that identifies a former apprentice boy. He retired 1 Feb 1958.

Wilmer C. Hitesman, ADC, who

is attached to Attack Squadron 55, received his 10th Good Conduct award. The award became due 10 Mar 1958.

During his long tenure in the Navy, which began 25 Jan 1918, Hitesman has had seven letters of commendation. Among these is one from the Secretary of the Navy for saving the life of a shipmate from drowning on 12 Apr 1939.

With more than 39 years in the Navy behind him, Hitesman has other awards which include the Korean Presidential Unit Citation Badge, China Service Medal, Commendation Ribbon, Presidential Unit Citation, Navy Unit Commendation, World War I Victory, American Defense, American Area, Asiatic-Pacific Area (three stars), World War II Victory, National Defense Service Medal, Korean Service (three stars), and United Nations' Service Medal.

Then there's the story of Laverne C. Corning, QMC, who spent his first 18 years in the Navy on continuous sea duty and settled down to finish his "20" in a shore billet—that was in 1935.

On 23 Jan 1958, he reenlisted and started his 39th year. Corning first enlisted in the Navy 14 Apr 1917 and moved up through the ranks to

become a Lieutenant during WW II. In 1950 he reverted to chief.

Corning is a destroyerman, attached to *DesLant*, who has seen every part of the world except Australia.

In recalling his 38 years of service, he remembered being put on report only once. "That was in my first hitch," he said. "I was caught for having non-regulation lashing on my hammock and received four hours' extra duty."

But the *DesLant* Chiefs have their own version. "It had nothing to do with his hammock," they say. "He was put on report for having rust on his bow and arrow."

Naval Air Weapons Meet

Air units of the Pacific Fleet collected four of the six perpetual trophies awarded during the third Annual Naval Air Weapons Meet held at the El Centro Auxiliary Naval Air Station.

This year's meet saw 15 squadrons seesawing for the lead in air-to-air gunnery, heavy attack bombing, all weather lead Collision Rocketry and air-to-ground light attack competition right up until the last round of ammunition and final bomb were



HOT SHOT—Bullpup, Navy's air-to-ground guided missile can hit bullseye, a four-inch target two miles away.

expended. It was the largest gunnery meet ever held by the Navy and it offered the keenest competition yet seen.

Fighter Squadron 111 based at NAS Alameda was awarded the Earl Trophy for winning the air-to-air phase of the gunnery competition.

VF-13 based at NAS Jacksonville, and Marine Fighter Squadron 232 from MCAS Kaneohe, Oahu, T.H., were tied for second place requiring a last day shoot-off which moved VMF 232 to second place.

VF-111's winning team flew FJ-3 *Fury* jets, while VF-13 was flying F9F-8 *Cougars*, and the Hawaii-based Marines (VMF-232) used FJ-4s. Other air-to-air competitors included: VMF-333 of Miami, Fla., flying FJ-3s, and VFTU-223 from NAS Beeville, Tex., flying F9F-8s.

CAPT Charles O. Hiett, USMC, of VMF-232 made the highest individual score in the air-to-air competition for day fighters.

Each aerial combat team was made up of four pilots and an alternate, plus a ground crew of 30.

Attack Squadron 126 of the Miramar Naval Air Station was awarded the Kane Trophy for winning the air-to-ground light Attack Team competition. VA-126 used F9F-8Bs during the meet. Other light attack entrants included VA-145, also from Miramar, flying AD *Skyraiders*; and two Marine Attack Squadrons, VMA-311 from El Toro, and VMA-533 from Cherry Point, N. C., both flying *Cougars*.

CAPT J. W. Detroy, USMC, of the Marine Attack Squadron 311 based at MCAS El Toro, received the Herman Trophy for the individual air-to-ground light Attack championship.

In the all-weather air-to-air lead collision rocketry phase, VF-213 from NAS Alameda won the James V. Forrestal Memorial Trophy in competition against VF-102 from Jacksonville. Both squadrons flew F4D *Skyrays*. Individual honors in this category went to LCDR D. M. Longton, USN of VF-213.

Heavy Attack Squadron Five based at Sanford, Fla., won both the ADM Apollo Soucek Trophy and the Skywarrior Trophy for being the champion heavy attack crew and placing first in the heavy attack competition. They competed against AH-8 from NAS Whidbey Island. Both squadrons flew twin-jet A3D *Skywarriors* in the bombing competition.



BRIDGE PILOTS—Crew members of USS *Etlah* man controls of flying drones.

World's Smallest Sea-Going Aircraft Carrier

The net-laying ship *uss Etlah* (AN 79) claims to be the "world's smallest aircraft carrier." Her planes are only nine feet long.

She's a drone-launching and recovery-ship. She launches the small radio-controlled drone aircraft from a portable launcher on her bow and acts as control ship during "flight operations."

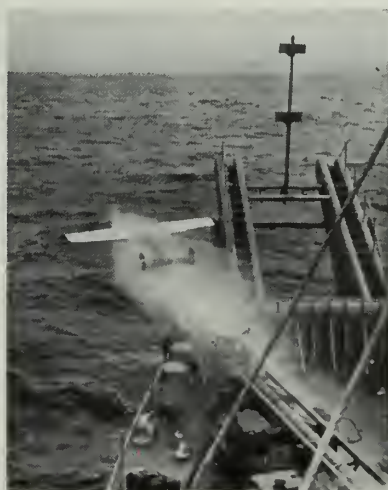
With her "plane squadron," UTRON Five's KD Unit, aboard, *Etlah* arrives at the assigned operating zone, heads into the wind like her big sisters and launches her

drone for gunnery drills.

The drone-controlling officer takes over and sends the drone on "attack" runs on a firing ship. These runs duplicate actual patterns used by attacking aircraft and provide good training for ships' gunnery crews.

When the exercise is completed, there is no "carrier" landing. The control officer releases the drone's parachute and the "plane" is recovered from the water, repaired if possible, and made ready for another gunnery exercise.

IN AND OUT—Drone leaves USS *Etlah* (AN 79) catapult at approximately 65 knots. Right: Target drone recovered from sea after landing by chute.



Brief news items about other branches of the armed services.



SKY SCOOTER—Airborne jeep being developed by Army will do most jeep tasks and has characteristics of copter.

AVIATION GASOLINE improves when stored in pits carved out of ice. The Army Corps of Engineers learned this after storing the fuel in a tunnel driven into the Arctic icecap to a distance of nearly 1200 feet.

The fuel, which evaporates rapidly and takes on other impurities under normal climatic conditions, can be stored indefinitely in the pits under the icecap. Scientists have determined that the fuel not only retains all of its properties but is even improved after an extended storage period.

The pits, four feet wide and five feet deep, were located at several points in the ice tunnel, 150 to 400 feet back from the entrance. Each pit was covered only with plywood board and sealed by ice slush when the engineers suspended work on the icecap in the fall of 1956. When work was resumed in the Arctic in the spring of 1957, scientists found the fuel, none of which had evaporated, in even better condition than it had been when placed in the pits seven months before. They said the fuel contained less moisture as a result of the low and constant temperatures.

The Engineer Arctic Task Force returned early this year after finishing its work for the 1957 season. The tunnel was started in the spring of 1955 and the '56

and '57 summer seasons saw it extended to 1170 feet. Various sized rooms have been cut into the ice, one of which is 33 feet wide and 104 feet long. These rooms were cut out to study the feasibility of using such excavations for military purposes.

An automatic coal-cutting machine was used during the last trip to the Arctic to extend the tunnel. The cuttings were removed by a battery-operated, narrow gage locomotive and cars installed during the 1956 season.

Wooden pegs have been frozen into the ice to detect room and tunnel deformation, and the amount of deformation is checked periodically by measuring the distance between the pegs. Scientists on the project say that the rate of closure is affected by the amount of ice over the opening and physical properties of the ice. It was pointed out that the Arctic tunnel passes through five different types of ice.

Scientists on the project have already concluded that under-the-ice installations could be used for storage fuel dumps, air raid shelters or even living quarters. Temperature under the ice remains almost constant at about 15 degrees Fahrenheit.

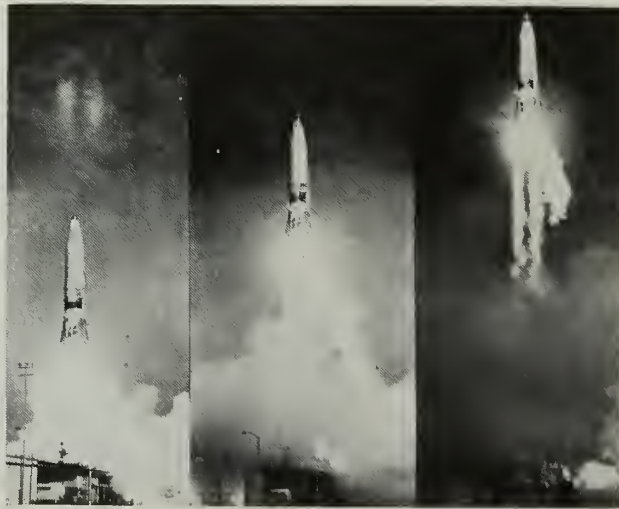
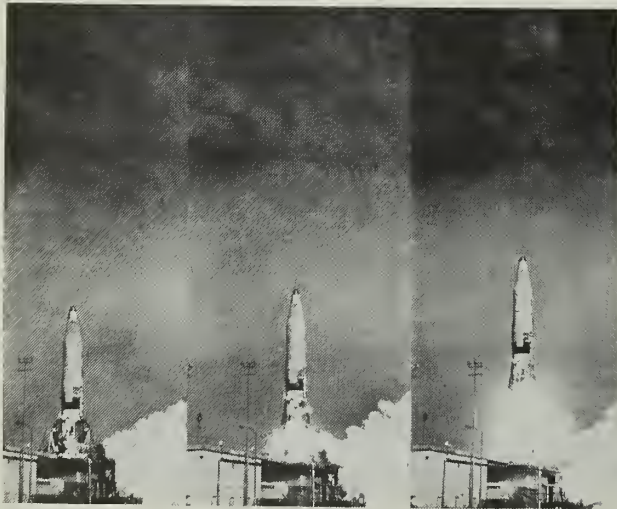
★ ★ ★

A NEW AWARD in the field of flight safety, the Koren Kolligian, Jr. Trophy has been announced by the Air Force. It is to be awarded annually to the USAF pilot or aircrew member who most successfully copes with an emergency situation in flight. The trophy is a bronze statue on a white marble base symbolizing an Air Force jet pilot.

The trophy is awarded in the name and memory of First Lieutenant Koren Kolligian, Jr., USAF, lost in a flight off the Farrallon Islands (San Francisco), Calif., in 1955.

The award is established to recognize outstanding feats of airmanship by aircrew members who by extraordinary skill, exceptional alertness, ingenuity, or proficiency averted aircraft accidents or minimized the seriousness of accidents in terms of injury, loss of life, aircraft damage, or other property damage.

ON THE UP AND UP—Sequence photos show Air Force's Atlas ICBM blasting skyward at Cape Canaveral, Fla.



AN INFRARED "EYE," so sensitive that it will detect evaporation from one droplet the size of a pinhead in an average living room, has been developed by the Army Chemical Corps. It will be used as a protective device against chemical warfare agents.

Intended for use by troops in the field, the new device, known as LOPAIR (for long-path infrared), will flash a warning light and sound a horn when a tiny amount of contaminant in the air as far as one quarter of a mile away from the point where the "detector head" crosses an invisible infrared beam. LOPAIR will detect contaminants even if they are colorless and invisible to the naked eye. In combat, it would warn soldiers to put on their protective masks. LOPAIR can also be used in air pollution studies and industrial establishments.

The current model of the alarm consists of two separate parts. One unit, called the "detector head," is mounted on a tripod and contains the source of infrared light, a mirror that directs the beam along the path, and a detector to analyze the beam when it returns.

The other unit, which also may be mounted on a tripod, is a special self-aligning mirror that is placed at the other end of the path and returns the beam to the detector. The detector part weighs 39 pounds and the mirror unit weighs 15 pounds. Each unit can be carried easily by one man, and the complete alarm can be set in operation in less than five minutes. Storage batteries supply the power.

★ ★ ★

A PORTABLE WATER-COOLING TOWER has been developed for use with the Army's mobile liquid carbon dioxide generating plants in the field. The unit permits re-use of about 20 per cent of the water consumed by the plant each minute. It is being tested with 300-pound-per-hour plants at Fort Belvoir, Va.

The unit consists of a tower section and an operating platform mounted on a semi-trailer. A 240-gallon per minute recirculating water pump, pressure gauges, thermometers, electrical control panel, water filters and a water treatment tank are mounted on the operating platform in front of the semi-trailer.

★ ★ ★

THE ARMY HAS BEEN INSTRUCTED by the Secretary of Defense to continue to develop its anti-ICBM missile system, *Nike-Zeus*.

This is a missile system designed to intercept intercontinental ballistic missiles equipped with nuclear warheads aimed at the United States.

Nike-Zeus is a part of the family of Army missiles known as *Nike*. Forerunners of the anti-missile missile are *Nike-Ajax*, which is in position around major strategic and industrial areas of the United States, and *Nike-Hercules*, which will supplement *Ajax*. *Hercules* is designed to destroy whole flights of incoming bombers, regardless of their speed or altitude. *Nike-Ajax* sites are convertible to *Nike-Hercules*.

Nike-Zeus is named after the supreme deity of Greek mythology. Zeus, whom the ancients revered as, among other things, a punisher of wrongdoers.

The Army is also developing *Plato*, a mobile system for protection of field armies against ballistic missiles. It will use the *Zeus* missile.



AIR FORCE pilot stands by his sleek F-102A Delta Dagger wearing high altitude partial pressure suit.

A SUN COMPASS with improved accuracy, versatility and operational range has been developed by the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va.

The new universal sun compass provides a means for land navigation at all north or south latitudes, and can be used with many navigational stars. A clock mechanism provides for the mechanical tracking of the sun or stars. Its predecessor was limited in its daytime operation from the equator to 45 degrees north or south latitudes and it could be used only with the North Star.

The compass is provided with a weatherproof carrying case, and is designed to permit rapid mounting of case and compass on vehicles. The compass is also readily removable from its case for mounting on a vehicle or for other uses.

Specialist training for operation of the compass is not required. Unit training in advanced map reading, supplemented by approximately two hours of instructions, or earlier experience, in star identification, and one hour in actual operation of the sun compass will be enough for the average soldier.

Although simple in design, light in weight, and compact, the improved compass is of rugged construction.

★ ★ ★

AN EXPENDABLE ALUMINIZED SUIT for the protection of fire fighters has been tested by the Army.

Early reports on the tests indicate that men wearing the suit over duty uniforms were able to stand within two feet of a forest fire for two to three minutes without discomfort, although the heat was so intense that exposed portions of helmet liners were blistered. The suit is made of flame-retardant treated aluminized kraft paper. It consists of a parka with hood, a face mask, a pair of leg sleeves and a pair of mittens.

THE WORD

Frank, Authentic Advance Information On Policy—Straight From Headquarters

• **GOING OUT ON 20?**—If you are approaching the end of 18 years of service and are planning on going out on 20, this is a reminder that you may want to take a good look at the provisions of the Uniformed Services Contingency Option Act.

This act, which applies to all officer and enlisted personnel, allows you to provide an income for your survivors by electing to receive a reduced amount of retired pay. You may provide an annuity equal to one-half, one-fourth or one-eighth of the reduced amount of retired pay. The act provides for four types of annuities.

If you want to provide this benefit for your survivors, you must make the election before you complete 18 years of service for basic pay purposes. These 18 years, you will notice, are not limited to "years of satisfactory federal service."

Complete information may be found in BuPers Inst. 1750.1B.

• **BUPERS MANUAL**—Thirteen major revisions, covering a wide variety of subjects, have been incorporated in the *BuPers Manual* as Change No. 28 to that publication. The changes include:

Revisions in Navy Personnel Claims Regulations.

Instructions for preparing the revised Officer Leave Record, Form NavPers 329 (Rev. May 1957).

A revised sample of the Enlisted Classification Record.

Revised exhibits showing entries to be made on the Administrative Remarks Page of enlisted service records.

A revised sample of the Armed

Forces of the United States Report of Transfer or Discharge (DD-214).

Up-to-date information on the classification of officer and enlisted personnel.

New instructions requiring authority from the Chief of Naval Personnel before enlisted personnel with limited duty designators may be permitted to extend their enlistments, reenlist or obligate themselves for additional active duty.

A definition of submarine designators and clarification of procedures for qualification in submarines.

Inclusion of information on the release to inactive duty of Naval Reservists and Fleet Reservists in the instructions for separation of enlisted personnel for the convenience of the government.

Instructions for the early separation of enlisted personnel which include the release to inactive duty of Naval Reservists and Fleet Reservists.

Instructions for immediate reenlistment in the Naval Reserve of members of the Reserve on inactive duty.

Directions covering physical examinations for personnel entering active duty in the event of mobilization.

Revised requirements for wearing of the uniform by officer and enlisted Naval Reservists.

• **UNIFORM CHANGES**—New enlisted insignia, discontinuation of certain distinguishing marks, and indefinite retention of the officer/CPO blue raincoat are among the latest changes to *Uniform Regulations* approved by the Secretary of the Navy.

Two new insignia have been approved for future wear. The general service rating of Photographic Intelligence man will have a specialty mark of a stereoscope together with a graphic solution of a photographic problem. The new exclusive emergency insignia for Telecom Censorship Technician will have as a specialty mark the block letter K enclosed in a diamond.



The distinguishing marks discontinued as no longer needed are those for Aviation Utility; Bombsight Mechanic; Master Horizontal Bomber; Ordnance Battalion; and Seaman Gunner.

The raincoat decision will allow chiefs and officers to continue to wear their "trench-coat" style blue coats indefinitely as an optional item of uniform. It was originally scheduled to be discontinued as of 1 Jul 1960.

The changes will be promulgated in future changes to *U. S. Navy Uniform Regulations*.

• **NEW PAY GRADES**—Two new pay grades for enlisted personnel—E-8 and E-9—have been established by Public Law.

The new law, passed by the 85th Congress, authorizes a maximum of one per cent of the Navy's total enlisted strength for pay grade E-9 and two per cent for E-8. At maximum strength, according to current plans, 75 per cent of CPO requirements may be in pay grade E-7, 19 per cent in pay grade E-8, and six per cent in pay grade E-9.



"UP AND DOWN the line . . . All Hands Magazine is for you and nine other naval personalities. Pass it on."

E-8 and E-9 billets will be distributed among all ratings in proportion to the number of petty officers in each rating. Candidates for advancement to E-8 and E-9, including TARs, will be required to meet the minimums of time in rate and time in service described below, and must be recommended by their commanding officer to compete in a regular service-wide advancement examination.

Candidates who successfully complete the written examination will then have their records reviewed by a Selection Board at the Bureau of Naval Personnel, which will make the final selections.

The minimum eligibility requirements for advancement to E-8 are:

- Currently serving as permanent appointment in pay grade E-7.
- Four years' service in pay grade E-7 and 11 years' total naval service.

For advancement to E-9, the minimum eligibility requirements are:

- Currently serving as permanent appointment in pay grade E-7.
- Six years' service in pay grade E-7 and 13 years' total naval service.

The first service-wide examinations for pay grades E-8 and E-9 will be administered in August 1958. These examinations will be in three sections, the first covering technical qualifications of the particular rating, the second covering military knowledge and leadership, and the third specially designed to test the individual's comprehension and reasoning ability.

The scores achieved on the first two sections of the examination will determine whether or not the individual is considered by the Selection Board. The score achieved in the third part will be used as an additional factor in selecting personnel to be advanced. The selection will be based on overall technical and military ability as well as factors now considered for enlisted advancements.

Candidates for pay grades E-8 and E-9 are advised to review the training courses and study materials specified for their rating in "Training Courses and Publications for General Service Ratings" (NavPers 10052 series) as the best means of studying for the examinations. Resubmission of training courses is not required.

Pay grade E-9 will be called *Master Chief Petty Officer* (as, for example, BMCM); and E-8, *Senior Chief Petty Officer* (BMCS).

Further details may be found in implementing instructions to be issued at an early date, which will be described in **ALL HANDS**.

• **AUGUST EXAMS** — Now that June is here it's time once again to begin thinking about those advancement examinations for pay grades E-4, E-5 and E-6. They're only about two months off. These all-important tests will be held on the following dates for advancement to the pay grades indicated below:

- E-4 (PO3)—Thursday, 7 Aug 58
- E-5 (PO2)—Tuesday, 12 Aug 58
- E-6 (PO1)—Thursday, 14 Aug 58

In preparation for this annual event you may want to check BuPers Notice 1418 of 4 Apr 1958, which lists the directives pertaining to the over-all advancement in rating program and gives a bibliography of the notices and instructions affecting individual ratings.

Because there are many vacancies in all pay grades, except E-7, of the newly-formed Nuclear Weapons Man rating, all personnel (except E-7s) who meet the eligibility requirements contained in BuPers Inst. 1440.22 are being encouraged to compete for horizontal change of rating to NW, or for simultaneous conversion and advancement to NW rates. Bureau authority for such examinations is not required for those who meet the qualifications outlined in Paragraph 4 of Instruction 1440.22.

• **RHODE ISLAND KOREAN BONUS** —Information on the Korean Veterans' Bonus from Rhode Island was not included in last month's round-up because the deadline for submitting applications had expired.

Since then, however, the deadline has been extended until 31 Oct 1958.

To qualify, you must have:

- Served on active duty in the armed forces during the period 25 Jun 1950 to 27 Jul 1953.
- Been a resident of Rhode Island for six months immediately before entering into active service.
- Been discharged or released from the service under conditions other than dishonorable.

The Korcan Veterans' Bonus Board is at Armory of Mounted Commands, 1051 North Main St., Providence 4, R. I. Remember that deadline.

QUIZ AWEIGH

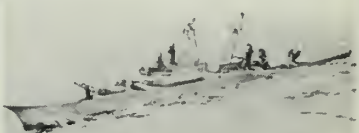
If you have been keeping pace with recent developments in today's fast changing Navy, you'll have smooth sailing with this month's Quiz Aweigh.

1. On 17 Mar 1958 the Navy launched its first test satellite. It is traveling farther out in space than any other man-launched object. This baby moon has been dubbed (a) Explorer I, (b) Vanguard I, (c) Moonlet I.



2. Weighing about three and a quarter pounds, this tiny 6.4-inch test sphere is expected to stay in orbit for as long as 200 years. The six rectangular vent-like openings forming a symmetrical pattern around the miniature satellite are (a) erosion gauges, (b) microphones, (c) solar batteries.

3. Here's a real eye-opener. Slated for construction as part of the Navy's 1959 Shipbuilding Program, it will be the Navy's first (a) DD(N), (b) DLG, (c) DLG(N).



4. This ship will be able to travel at full speed for prolonged periods and will have an unlimited cruising range—a far cry from the average conventional type destroyers that are capable of cruising at 12 knots for about (a) 3000 miles, (b) 5000 miles, (c) 7000 miles.



5. The plane pictured above is making a landing aboard one of the Navy's angled deck carriers. The result of some nine years of naval research, the landing is being made by (a) Automatic Carrier Landing System, (b) Mirror Landing System, (c) Landing Signal Officer System.

6. The plane making the landing is an (a) A3D Skywarrior, (b) F4D Skyray, (c) A4D Skyhawk.

Check your answers on page 50.

THE BULLETIN BOARD

Preliminary Exam for EMs Applying for Naval Academy Will Be Given in July

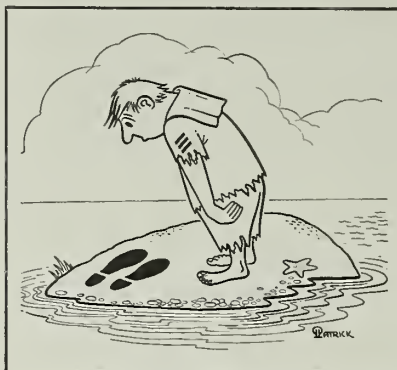
Men in the Navy and Reservists on active duty who qualify and have obligated service to 1 Jul 1959, may take the preliminary examination for assignment to the U. S. Naval Preparatory School as candidates for appointment to the U. S. Naval Academy if they enlisted by 1 Jul 1958. The preliminary examination will be given throughout the Navy on 7 Jul 1958.

Only those men who have excellent records and who are believed to be suitable candidates for appointment to the Naval Academy and ultimate commissioning shall be recommended. Other qualifications are:

- Be of officer caliber.
- Be a male citizen of the United States.
- Be not less than 17 nor more than 22 years of age on 1 July of the year in which the Naval Academy entrance examination is held.
- Have completed at least three years of a high school course, or the equivalent, and have received credit for the satisfactory completion of two years of either algebra or geometry or have received credit for the satisfactory completion of one year each of both algebra and geometry.
- Have a combined GCT-ARI score of not less than 105.
- Be able to meet the physical requirements for admission to the Naval Academy.
- Not married nor ever have been married.

Applicants are required to take the preliminary examination to determine their degree of aptitude in subjects involved in the Naval Academy entrance examination. Candidates who successfully meet these initial requirements are then transferred to the Naval Preparatory School at Bainbridge, Md., for the session beginning in September.

The 160 Regulars from the Naval Preparatory School who finish high-



est in the Academy entrance examinations given in March are appointed to the Academy. The two-year-active-duty Reservists from the school and the inactive-duty Reservists compete for the 160 Reserve appointments in a similar manner. Those standing below the first 160 in the competitive list for their component, but who pass the entrance exam, become eligible for admission if eligible candidates fail the physical exam, or for other reasons, do not enter the Academy.

Correspondence Courses for Aerographers, Lithographers

New Enlisted Correspondence Courses, now available are:

Aerographer's Mate 1, NavPers No. 91643.

Lithographer 2, Vol. I, NavPers No. 91473-1 (May be retaken for repeat Naval Reserve credit.)

Enlisted Correspondence Courses will be administered (with certain exceptions) by your local command instead of by the Center.

If you are on active duty, your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command for administration.

Those on inactive duty will have courses administered by the Center (Form NavPers 580).

Navy's First Photographic Intelligencemen Selected, More Will Have Opportunity

The establishment of the Photographic Intelligenceman (PT) rating, for enlisted personnel on active duty, was announced in BuPers Notice 1223 of 2 Oct 1957. The qualifications for advancement in this rating were included in Change 10 to the *Manual of Qualifications for Advancement in Rating* (NavPers 18068, Rev.).

Personnel were considered if they fulfilled the basic qualifications for the PT rating and requested a change to this rating in equal pay grade (without examination), and held Naval Enlisted Classification special program codes 9960, 9961, 9962 or 9963.

These requests were screened and authorizations for the change in rating were made available in April. Only very limited numbers of outstanding applicants were chosen: 14 in E-7, 18 in E-6, 4 in E-5, and 1 in E-4.

The first examinations for the PT rating will be given in August 1958 for pay grades E-6 and below, and in February 1959 for pay grade E-7.

Those below E-7 who were not authorized for direct change in rating (although they did meet the basic requirements) still have an opportunity to change by successfully competing in the August 1958 exams. However, individual authorization to compete is required from the Chief of Naval Personnel in each instance and, according to earlier directives, these applications should have reached the Bureau by 15 May 1958. BuPers Note 1440 of 7 Feb 1958 carries further information on this.

E-7s whose previous requests to change to this rate were not approved but who do meet the requirements will have another opportunity by successfully competing in the February 1959 exams. They, too, will need individual authorization from the Chief of Naval Personnel to compete. Applications from E-7s should reach the Bureau not later than 1 Oct 1958.

Future requests for change in

rating to PT will be in accordance with the procedures outlined in BuPers Inst. 1440.5B.

Other changes taking place in the rating structure include the disestablishment of the emergency service ratings BMG, BMS, BMR, CSG, CSR, CSB, SDO and SDS. For those Naval Reservists and Fleet Reservists on active duty who are in these categories, their ratings will be changed in equal pay grade between 1 Mar 1958 and 1 Jul 1958. Changes to be made include:

- Boatswain's Mate, Shipboard (BMG); Boatswain's Mate, Stevedore (BMS) and Boatswain's Mate, Rigger (BMR) — all changed to Boatswain's Mate (BM).

- Commissaryman, Ships Cook (CSG); Commissaryman, Butcher (CSB) and Commissaryman, Baker (CSR)—all changed to Commissaryman (SC).

- Steward, Cook (SDG) and Steward, Stateroom Steward (SDS) —changed to Steward (SD).

Even though these men will have new ratings, their special skills will not be lost since their NECs will carry the necessary identification.

Naval Reservists and Fleet Reservists on inactive duty who carry these ratings will have them changed later by commands holding their records.

The latest change in the rating structure, which combines the Metalsmith (ME) and Pipefitter (FP) ratings into a new general rating of Shipfitter (SF), has been approved by the Secretary of the Navy.

This means that all rates of the general service and emergency service ratings of ME and FP have been disestablished, and the rating of SF

in pay grades E-6 and E-7 has been established. It also means that the ratings of Shipfitter M (Metalsmith) and Shipfitter P (Pipefitter) in pay grades E-4 and E-5 have been established. It boils down to the fact that although you might be an SF(M), once you move up to become an E-6 or E-7 in the SF rating, it will be up to you (with the help of course books) also to have the knowledge of an SF(P).

The normal path of advancement in the Shipfitter general rating will be to Warrant Ship Repair Technician and/or to LDO, Hull.

Dependents Info Center Starts Second Year at Norfolk

"I must have another dependents identification card — I've dyed my hair a different color."

This was just one of nearly 15,000 requests replied to by the Dependents Information Center at the Naval Base, Norfolk, Va., during its first year of operation. Now moving toward its second birthday, the Center will soon rack up another large number of assists to active duty and retired military personnel and their dependents.

Something of an innovation, the Dependents Information Center answers all sorts of queries from servicemen (regardless of branch of service) and their dependents. It maintains listings of housing for rent and property for sale by members of the armed forces. And, it also has information on overseas living conditions, pay, allowances, benefits, social security, recreational facilities, medical services. As well as information on Navy Exchanges, commissary stores, schools, churches, shipment of household effects, domestic help and baby sitters.

In addition, the Center offers the free service of a notary public; issues identification cards to dependents, widows, Reservists and retired personnel; helps newcomers to find their way around the base, the city and the state; and maintains liaison with Navy Relief, the Red Cross, Navy Wives clubs, Travelers Aid and other agencies in the area.

The man in charge of the Center is John M. Brook, MMC, USN. His civilian assistant is Myron O. Wilcox, a retired CPO. Financially, the Center is supported by Fifth Naval

District Special Services funds.

The Center has been in business since 15 Aug 1956, when it was established on an experimental basis. It is the only such Navy facility on the East Coast.

On the West Coast there is a counterpart of the Norfolk Center located at San Diego, Calif.

Do You Have any Comments Or Recommendations on Traffic Laws of the Sea?

The Navy's Rules of the Road Committee, established early this year by the Chief of Naval Operations, is seeking recommendations and comments from naval sources concerning proposed future changes to the traffic laws of the sea.

The committee, under the guidance of RADM L. P. Ramage, USN, consists of representatives from the Office of the Chief of Naval Operations and the Bureau of Ships, Military Sea Transportation Service, and the Office of the Judge Advocate General of the Navy. The committee was established to insure Navy participation in matters relating to the Rules of the Road.

First effective in 1897, the International Rules were modernized to some extent by the International Conference on Safety of Life at Sea, 1948, but many questions involving technological and operational advances (such as radar), although considered, were not solved at that time. Some significant changes, however, were made as a result of the 1948 conference but, by and large, shipping is still governed by rules written some 70 years ago.

Anticipating a 1960 international conference which will consider further changes, the committee is now gathering recommendations from naval sources.

In a recent OpNav Notice, the committee has asked that comments, suggestions or recommendations for changes to Rules of the Road be submitted by letter to the Chief of Naval Operations (OP-341E).



"But I thought this was the line for the third class exam."

Press, Radio and Television Services for the Armed Forces

HOW ARE THE DODGERS doing this year? What's new with the Army? Does the Air Force have a new type fighter? What's going on in the rest of the world?

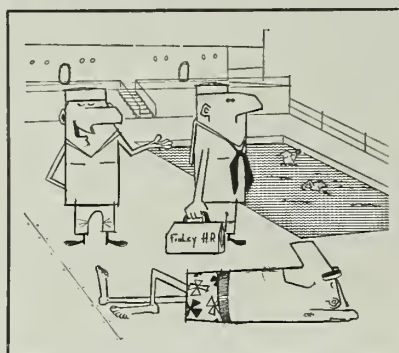
Questions like these and hundreds more are answered every day through the world-wide facilities of the Armed Forces Press, Radio and Television Service (AFPRTS). This organization is a service of the Department of Defense Office of Armed Forces Information and Education designed to keep the American serviceman fully informed on current events and his rights and responsibilities as a member of the military service even while he is serving on isolated duty stations far from home.

To accomplish this, AFPRTS takes advantage of the three principal means of mass communication—press, radio and television.

The Armed Forces Press Service (AFPS) publishes a weekly newspaper clip sheet which carries the latest in sport, political, military and general news as well as pin-up art, crossword puzzles and other features to station papers all over the world.

AFRS, the radio service, broadcasts over shortwave transmitters in New York, N. Y., and Los Angeles, Calif., the best programs available, including drama, comedy, news and most important of all, to many Navy-men, sporting events and news from the world of sport.

Fernando Mercado, SKSN, USN



"Our ship has been completely modernized."

The top rated commercial television shows are secured by the Department of Defense for rebroadcast from the 23 Armed Forces Television Stations girdling the globe. Each program is shipped via air transport to the overseas military stations.

Press Service

Senior member of the three military media outlets is the Press Service. Few military newspapers are published that do not carry one or more AFPS stories or some of the entertaining features included in the clip sheet. They are identified whenever they appear by (AFPS) at the beginning or end of the story.

The ancestor of AFPS was the Camp Newspaper Service (CNS) set up by the Army in August 1942.

Stencils, photographs and cartoons were sent out to stateside and overseas papers. "Miss Lace" gained world-wide fame through her appearance in CNS and the cartoon "The Wolf" also became famous.

In 1943 the Army News Service (ANS) began filing world, domestic and sport news which was transmitted overseas by Signal Corps telegraph. A branch office was opened on the West Coast to facilitate radio transmission to the Pacific area.

In March 1945 the Navy entered the picture with the Ship's Editorial Association sending material to 1200 Navy and Marine Corps newspapers. In 1946 ANS and CNS were merged to be joined by SEA in '49.

The AFPS clip sheet today is printed on a glossy paper with type set in newspaper-size columns and topped with ready-set headlines. Pictures are included along with comic strips, cartoons, gags, puzzles and various columns which can be cut out by a military editor and used "as is" in the station paper.

Radio Service

Although the AFPS Clip sheet is prepared and sent out from the New York editorial office the radio service originates both in New York (Atlantic service) and in Los Angeles (Pacific service). Live and recorded programs are broadcast over ten 50,000-watt short-wave transmitters on different frequencies and beamed to the 167 Armed Forces radio stations in various parts of the world for rebroadcast on standard broadcast frequencies and to anyone who owns a short-wave set.

A well balanced program schedule brings to the military listener news and sports along with musical, dramatic and educational presentations. AFRS news is taken from the wires of the three major news services and is complemented by such public affairs offerings as "Meet the Press" and "Capitol Cloakroom."

The AFRS sports department allows no major athletic event to pass without live or tape recorded coverage. Sport features including interviews with players, coaches and prominent officials are aired when sporting events are not being broadcast. Boxing is a regular feature (two fights a week plus championship

Armed Forces Radio Service Schedule

TRANSMITTER	TIME (GMT)	FREQUENCY	BEARING	BEAM AREA
AFRS New York				
WDSL 1	1730-2245	21.65 mcs	55°	Europe
WRUL 2	1730-2245	15.35 mcs	3°	Greenland
WRUL 3	1730-2245	17.71 mcs	160°	Caribbean
WBOU 6	1730-2245	15.27 mcs	42°	Europe
WBOU 5	1730-2245	17.78 mcs	42°	Europe
AFRS Los Angeles				
KCBR 1	0130-0630	21.74 mcs	296°	Philippine-Marianas
KCBR 2	0100-0700	15.13 mcs	306°	Japan-Korea
	0730-1500	9.70 mcs	306°	Japan-Korea
KCBR 3	0100-0700	17.85 mcs	306°	Japan-Korea
	0730-1500	11.87 mcs	306°	Japan-Korea
KCBR 4	0630-0730	15.29 mcs	296°	Philippine-Marianas
KCBR 5	0100-0630	15.315 mcs	321°	Alaska-Aleutians
	0700-1200	5.57 mcs	321°	Alaska-Aleutians
	1215-1500	15.315 mcs	110°	Caribbean

NOTE: A short conference period held during the first 10 minutes of transmitter operation is used to announce the daily schedule and important news, sports and entertainment features. Printed schedules are also sent to most military commands.

events) on the AFRS schedule the year around. During the summer months the emphasis is on baseball and after the World Series comes football, hockey and basketball.

As an example of this sport coverage take a look at the February schedule. In addition to boxing, AFRS carried the clash between the Boston Celtics and their 1957 rivals, the New York Knickerbockers. A week later (9 Feb) the Millrose Track Meet, one of the top attractions in the East was scheduled for the dash, hurdle and pole vault fans and on 10 Feb AFRS hockey fans heard a play by play account of the game between the Montreal Canadiens and the New York Rangers.

The entire AFRS schedule is broadcast to the Atlantic area over the five New York transmitters while an equal number in Los Angeles carry the program to Pacific military personnel. Call signs, times, frequency and bearing of the transmitters are listed in the box on preceding page.

AFRS transmitters are on the air seven days a week, 52 weeks a year, broadcasting the best in radio programs. Letters from a missionary in the Belgian Congo, a doctor in Barbados, a seaman in the Mediterranean, a private in the Middle East, a Merchant Mariner in the Indian Ocean and a civilian explorer in French Equatorial Africa—that is a cross section of the hundreds received each season by AFRS.

Television Service

The Armed Forces Television Service (AFTVS) now has a chain of 23 stations scattered around the world which it services with filmed programs. Some 250,000 military personnel and their families view the programs as well as live productions originating in the studios of each station, which are on the air 50 to 60 hours weekly.

AFTVS had its beginning on Christmas Eve, 1953, when the first program was broadcast from a pilot station at Loring (then Limestone) Air Force Base. This station continued operation until 1956 when a commercial station began operating in the Loring area.

In late 1954 a 50-watt station began broadcasting at Lajes Field in the Azores and another went on the air at Wheelus Field, Tripoli, Libya.

The next year a station was installed at Keflavik Airport, Iceland, and a short time later another went on the air in Greenland. Eventually it is expected that AFTVS will have 35 to 40 TV stations in service.

A typical AFTVS program shipping document shows 90 filmed programs being shipped to a military TV station. The running time of the shipment was 55 hours and included such stateside favorites as the Bob Cummings Show; Jimmy Dean; Climax; \$64,000 Question; World News Roundup; Meet the Press; Perry Como; Twenty One; Steve Allen; Wednesday Night Fights; and Highway Patrol.

Some of the program prints are

WHAT'S IN A NAME

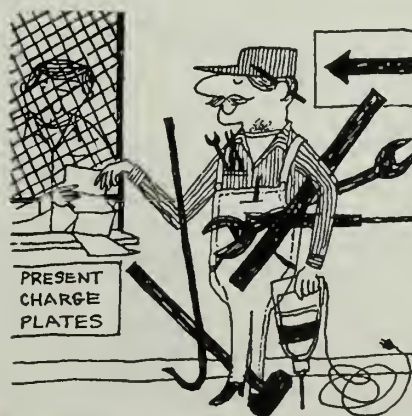
Charge Plates

To many Navymen the charge-plate is an infernal gadget which the little woman uses for running up bills when she goes on a shopping spree—but at the Boston Naval Shipyard charge-plates are being used to save money for Uncle Sam.

At the yard and its South Boston Annex there are 21 tool cribs, handling some 32,000 different kinds of tools worth more than three million dollars. The complex job of keeping track of them has now been made simpler and less expensive, thanks to the charge-plate.

When someone wishes to borrow a tool, he merely takes his plate to the nearest crib, where the plate is used to stamp a four-part chit charging the item to his "account."

The first part of the chit is kept for the crib's records, the second is the borrower's receipt and the last two are used by Central Tool Control to keep tab on the thousands of tools on loan to the 8000 workers at the yard.



purchased by AFTVS but the majority are received without charge from the networks and sponsors. The stations are kept informed of forthcoming programs and receive tips on successful operation of a TV station through the AFPTS weekly "Tele-Tips."

Most of the Armed Forces network stations represent an investment of less than \$50,000. In some cases this may rise to \$55,000 owing to extraordinary antenna and installation costs. Usually the stations are operated by military personnel as an additional duty, but because of the increasing schedule lengths, this is rapidly being changed.

In addition to the stations already mentioned, AFTVS has transmitters at Kindley Air Base, Bermuda; Dhahran Field, Saudi Arabia; Kagnaw Station, Asmara, Eritrea; Ramstein and Spangdahlem Air Bases, Germany; Thule and Sondrestrom Air Bases, Greenland; Goose Bay Air Base, Labrador; Harmon Air Base, Newfoundland; Eniwetok, Marshall Islands; Clark Air Base, Philippine Islands; Kadena Air Base, Okinawa; Seoul, Korea; Fort Clayton, Canal Zone; Ramey Air Base, Puerto Rico; U. S. Naval Station, Guantanamo Bay, Cuba; Fort Greely, Big Delta, Alaska; U. S. Naval Station, Kodiak and Adak, Alaska; and Port Whittier, Alaska.

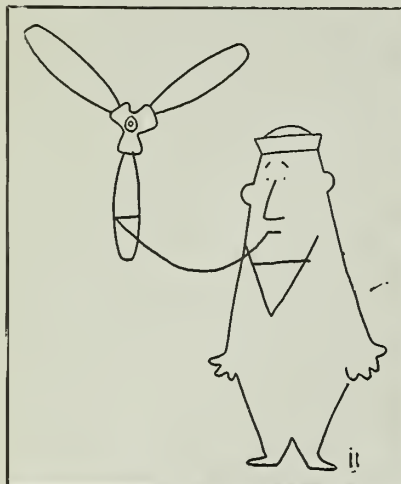
The Navy operates three of the stations, the remainder being operated by the Army or the Air Force.

Enlisted Men Selected For NROTC Enroll at Prep School

Approximately 300 active duty Navy and Marine Corps personnel have been provisionally selected for enrollment in the NROTC program and have been ordered to the Naval Preparatory School at Bainbridge.

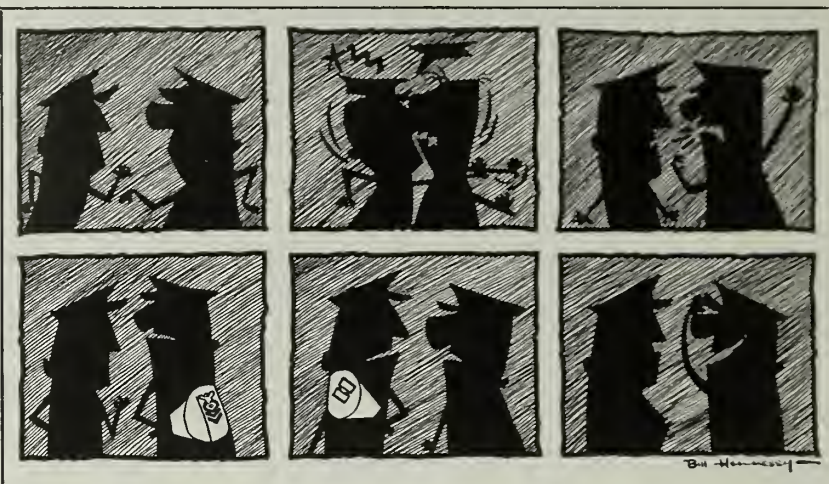
Those who received the provisional nod were selected on the basis of test scores attained in the Navy College Aptitude Test conducted on 14 Dec 1957. They have survived a preliminary screening of enlisted service records, but face final screening at the Prep School.

Intense refresher training and the careful screening will result in further attrition. Candidates finally selected will be appointed Midshipmen in the Naval Reserve and will report to college in September.



FIRST

—R. Carola, JO3, USNR



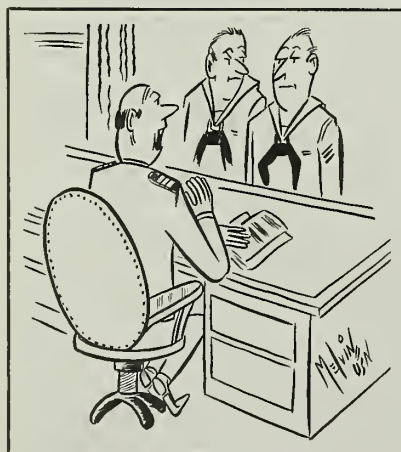
SECOND

—W. R. Hennessy, AN, USN

Here Are the Winners in the All-Navy Cartoon Contest



THIRD
"Report to my office after inspection, Cranch. It's time to promote you to Chief!"
—M. A. Anderson, HMC(SS), USN



FOURTH
"Your face is familiar, Jenkins. Haven't I busted you before?"
—J. F. Melvin, HM1, USN



FIFTH
—J. W. Rogers, HM3, USN

ROBERT CAROLA, JO3, USNR, of the Naval Air Test Center, Patuxent River, Md., has been awarded first prize in the third annual All-Navy Cartoon Contest.

This marks the second consecutive year that Carola, the sports editor and staff artist for *The Tester*—the station paper for the huge naval air station—has taken top honors in the All-Navy Cartoon Contest. Last year he captured second place.

Carola's prize-winning entry, showing a novel tooth extraction, was selected from more than 800 entrants by a panel of well-known civilian cartoonists and newspaper representatives. Judges considered the simplicity of Carola's cartoon as an important factor in its success.

Journalist Carola entered a total of five cartoons in this year's contest. Although an artist, Carola had never done any cartooning before entering last year's contest. After tasting success in the cartooning field, the All-Navy finalist is currently working on a cartoon book depicting Navy life.

The talented artist entered the Navy in 1956 and upon completion of recruit training was assigned to VR-1 based at Patuxent River. Carola is no newcomer to art. He graduated from the City College of New York where he majored in Advertising Design and Illustrations and won awards for his artistic achievements. Before coming on active duty for a two-year stint, he was employed by an art studio and an advertising agency.

Following his selection as the Navy's top cartoonist, Carola was given a free trip to New York City where he appeared on a nation-wide television show, and was honored by the Navy and the Newspaper Comics Council, Inc. Rear Admiral Chester C. Wood, USN, Commandant of the Third Naval District, presented him with the All-Navy Cartoon Contest Trophy on behalf of the Chief of Naval Personnel.

In addition to the trophy, the Navy presented him with a scale model of the aircraft carrier *Forrestal*, and the Newspaper Comic Council and an art school awarded him a \$300 scholarship to a cartoonist's correspondence course.

The other All-Navy trophy winning finalists in the third annual cartoon contest were:

- **Second Place:** William R. Hennessy, AN, USN, NAS Brunswick, Maine.

- **Third Place:** Muirrel A. Anderson, HMC (SS), USN, USS *Fort Snelling*, LSD 30.

- **Fourth Place:** Joseph F. Melvin, HM1, USN, USNRTC, U. S. Naval Base, Brooklyn, N. Y.

- **Fifth Place:** Jack W. Rogers, HM3, USN, U. S. Naval Hospital, Oakland, Calif.

The annual All-Navy Cartoon Contest is open to all naval personnel on active duty and their dependents. Entries are restricted to comic (gag or situation) cartoons which have a Navy theme or background, must be in good taste, and suitable for general consumption.

It is planned to have a similar contest again this fall. The dates for the 1958 contest will be published in a 1710 series BuPers Notice.

Sleeve Marks Okayed for Air Squadrons, Staffs, MCBs, UDTs

"Unit Identifying Sleeve Marks" have been authorized for wear by Navy enlisted personnel below grade E-7 attached to afloat staffs, aviation squadrons, mobile construction battalions and underwater demolition teams.

Formerly known as "Ship-Name Sleeve Marks," the unit marks have been authorized for some time for enlisted personnel below E-7 serving in commissioned ships. The authorization for afloat staffs, air squadrons, MCBs and UDTs is a recent decision

and will be officially promulgated in Change 5 to U. S. Navy Uniform Regulations.

The proper procedures for commands to follow in procuring appropriate unit identifying sleeve marks are covered in Naval Clothing and Textile Office Inst. 4200.1 of 21 Jan 1958 and NCTO Inst. 4200.2 of 27 Mar 1958.

In another action the Naval Clothing and Textile Office announced that white hats, authorized for wear by enlisted personnel, will no longer be obtainable in 1/8 size increments. When present stocks are exhausted the white hats will be issued in 1/4 sizes only.

The size change was made after a service evaluation found that stitching processes and subsequent laundering practically eliminated the 1/8 differential.

Early Separations Will Start This Month for Certain Navymen

Beginning 1 Jun 1958, separation will take place one month ahead of schedule for enlisted personnel who don't intend to remain on active duty after their obligated service is up.

The early separation is authorized by BuPers Inst. 1910.16, which applies to both Regulars and Reserves (including TARs) who would normally complete their active obligated service on or after 1 Jul 1958. It does not affect those transferring to the Fleet Reserve or Retired List, Regulars planning on immediate reenlistment at the end of their present hitch, or Reserves who wish to

continue on active duty beyond the date when their active obligated service would normally expire.

Early release for Navymen serving with deployed units may be delayed until return to the continental United States. However, the instruction does not permit retention beyond the normal EAOS.

The early separations have been authorized so that the Navy can meet budgetary requirements and manpower ceilings, and still make room for the high-quality recruits usually available during the months of June, July and August.

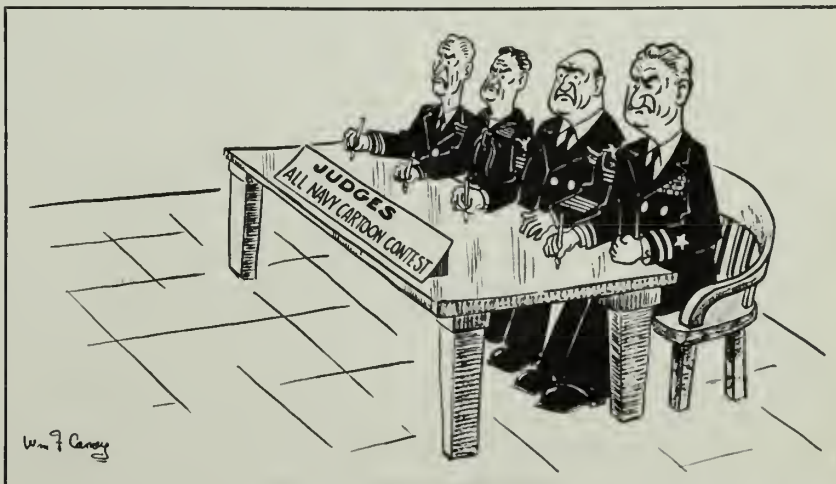
All the Latest Facts on How to Get Rid of The Rat

The Medical Department correspondence course, *Insect, Pest, and Rodent Control* (NavPers 10705) has been completely revised and reissued under the title, *Insect and Rodent Control* (NavPers 10705-A) and is now available to Regular and Reserve officers and enlisted personnel. Included in the course is information pertaining to insects and rodents, their living habits, manner in which they spread disease, and diseases with which they are associated. Included are methods for preventing and correcting infestation.

This course consists of two assignments evaluated at six points credit for purposes of Naval Reserve retirement and promotion. Naval Reservists who previously completed NavPers 10705 will receive additional credit for satisfactory completion of NavPers 10705-A.

All-Navy Cartoon Contest

—W. F. Carney, YN2, USNR(TAR)



List of New Motion Pictures Available for Distribution To Ships and Overseas Bases

The latest list of 16-mm feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in April.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

Gun Glory (1039) (C) (WS):

QUIZ AWEIGH ANSWERS

Quiz Aweigh is on page 43.

1. (b) *Vanguard I*, naturally.

2. (c) *Solar Batteries*.

3. (c) *DLG(N)*—Nuclear-powered guided missile frigate.

4. (b) 5000 miles.

5. (b) *Mirror Landing System*.

6. (a) *A3D Skywarrior*.

Drama; Stewart Granger, Rhonda Fleming.

Flood Tide (1049) (WS): Drama; George Nader, Cornell Borchers.

Copper Sky (1041) (WS): Drama; Jeff Morrow, Coleen Gray.

The Long Haul (1042): Drama; Victor Mature, Diana Dors.

All At Sea (1043): Comedy; Alec Guinness, Irene Browne.

Panama Sal (1044) (WS):

Drama; Elena Verdugo, Edward Kemmer.

Last Stagecoach West (1045) (WS): Western; Jim Davis, Mary Castle.

Undersea Girl (1046): Melodrama; Mara Corday, Pat Conway.

Chicago Confidential (1047): Drama; Brian Keith, Beverly Garland.

The Quiet American (1048): Drama; Audie Murphy, Michael Redgrave.

The Monte Carlo Story (1049) (C) (WS): Drama; Marlene Dietrich, Vittorio de Sica.

Wayward Girl (1050) (WS): Drama; Marcia Henderson, Peter Walker.

Man on the Prowl (1051): Melodrama; Mala Powers, James Best.

Raiders of old California (1052):

That's What the LAO Said—Advice Is More Useful than Sympathy

No matter how good our intentions, it seems that the best of us sooner or later run into a situation beyond our control. If our problem is concerned with legal matters, it's wise to find out what the Navy has to offer in the line of legal help. Here's a summary of the Navy's legal assistance program, originally prepared by LCDR Nathan Cole, Jr., USNR, for the JAG Journal:

Every major shore activity, every large staff and most large combatant ships have a Legal Assistance Officer (LAO). Smaller activities have a "referral officer," who can direct you to the nearest legal assistance officer or, if there is not one in your vicinity, can help you locate the nearest civilian Committee on Legal Services to the Armed Forces. If you are near an Army or Air Force activity, you are entitled to legal assistance from these sources if it is available.

Your Navy legal assistance officer will be a licensed attorney. He also occupies a unique position in the Navy: He is outside the chain of command so far as his legal assistance work is concerned. He may be professionally consulted by anyone—from seaman recruit up. He holds anything you may tell him in absolute confidence. He cannot disclose your confidence without your permission nor may

he be ordered to do so by a superior. He may correspond unofficially with other legal assistance officers if your problem requires such correspondence. He may refer you to a local practicing attorney if the situation indicates.

Legal assistance is intended to help you with your personal problems by providing legal advice and legal papers such as wills, powers of attorney, affidavits, and similar documents. Although a legal assistance officer cannot represent you in court, nor become your personal attorney, he can recommend a course of action to take and can draft letters and documents for your signature.

Legal assistance does not include strictly official matters nor does it provide counsel for courts-martial, investigations, or appearances before various boards. Official matters such as personnel or disbursing problems should be taken up with the Bureau or Office concerned, and qualified counsel for courts and boards are provided by the command concerned.

Here are a few points to remember if you want to get the most out of this service:

- If in doubt, ask for advice *before* you take action. Advice is more useful than sympathy.

- Talk to your man in person.

A telephone conversation is usually unsatisfactory. Your question may be one that cannot be answered immediately.

- Take all the letters, documents and papers with you. Your legal officer prefers to see the papers themselves instead of depending upon your recollection.

- If in doubt, see your legal officer. Don't worry about bothering him because your problem is relatively small. Legal problems are sometimes like fires—it's easier to deal with them when they're small.

- Tell both sides of the story, and all of the story. It might be embarrassing to admit you were foolish, but here you are at least protected by the privacy of his office. If you hold out on him, he simply can't act in your best interests.

Legal assistance is, of course, free. If, after talking it over with your legal assistance officer, you decide that a civilian attorney is needed, the attorney will have to be paid although he will sometimes adjust his fee to fit your financial condition. If you are completely without funds, Legal Aid or free civilian legal service may usually be found. Legal Aid is normally available only where there is a real need and you are absolutely unable to pay.

Western; Jim Davis, Arleen Whelan.
Witness for the Prosecution (1053): Drama; Tyrone Power, Marlene Dietrich.

No Down Payment (1054) (WS): Drama; Joanne Woodward, Sheree North.

Stopover Tokyo (1055) (C) (WS): Drama; Robert Wagner, Joan Collins.

Darby's Rangers (1056): Drama; James Garner, Etchika Chureau.

The Violators (1057): Drama; Arthur O'Connell, Nancy Malone.

Eighteen and Anxious (1058): Melodrama; William Campbell, Martha Scott.

Kiss Them for Me (1059) (C) (WS): Drama; Cary Grant, Jayne Mansfield.

Under Fire (1060) (WS): Drama; Rex Reason, Henry Morgan.

The World was his Jury (1061): Drama; Edmond O'Brien, Mona Freeman.

Pursuit of the Graf Spee (1062): Drama; John Gregson, Anthony Guayle.

The Deep Six (1063) (C): Drama; Alan Ladd, Diane Foster.

Scholarships Offered for Navy Sons and Daughters

Two new scholarship funds—one for young men who plan to enter the Naval Academy, and the other for the daughters of Navy or Marine Corps officers or USNA faculty members—have been established by Navy women's clubs.

The first, a self-aid scholarship grant set up by the Naval Officers Wives Club of Washington, D. C., is designed to help an outstanding young man between 16 and 20 to prepare for the Naval Academy and a career as a naval officer. It will amount to at least \$500. The scholarship is good for one year and may not be renewed. However, there are plans to offer additional grants in following years and, if necessary, the value of the grant or grants will be increased.

Recipients will be selected on the basis of need, mental and physical superiority, leadership qualities and evidence of a desire to make the Navy a career. An applicant must present a doctor's certificate that he is fully qualified to pass the physical examination for the Academy.



"It's the most difficult job on the base!"

Application blanks may be obtained from the Secretary of the Naval Officers Wives Club Scholarship Fund, Mrs. Mell A. Peterson, 3306 Cameron Mills Rd., Alexandria, Va., or from the Dependents Aid Section, Pers G-221, Personnel Affairs Division, Bureau of Naval Personnel, Washington 25, D. C. The completed forms for the 1958 award must be in the hands of the Scholarship Selection Committee by 15 June of this year.

The other scholarship, established by the Naval Academy Women's Club, Annapolis, Md., is for four years and amounts to \$300 per year. It will be awarded annually to a natural-born, legally adopted daughter, or step-daughter of a Naval Academy faculty member or of a

Regular Navy or Marine Corps officer on active duty, retired or deceased.

This grant will be made on the basis of scholarship, character and need. All other factors being equal, preference will be given to the daughters of deceased personnel.

Application forms may be obtained from the Bureau of Naval Personnel (Pers G-221), Washington 25, D. C., or from the Naval Academy Women's Club, Annapolis. When completed, they should be sent to the Personal Affairs Division (Pers G-221), Bureau of Naval Personnel. The annual deadline for receiving applications will be March 20th.

Further information is available from the Scholarship Chairman, Mrs. Perley M. Clark, 102 Conduit Street, Annapolis, Md.

CPOs and PO1s Selected For Warrant Officer

Six first class and 13 chief petty officers have been issued temporary appointments to Warrant Officer, W-1.

These appointments are from an eligibility list established by a selection board convened 5 Feb 1957.

Regular Navy appointments were broken down into the following designators: Boatswain (7132), five; Electrician (7542), two; Machinist (7432), nine; Aviation Electronics Technician (7612), three.

Navy-Marine Memorial Stadium Begins to Take Shape

The Navy-Marine Corps Memorial Stadium at Annapolis, Md., is beginning to take shape.

Construction was started on the 28,000-seat memorial on 1 March, even though the Stadium Fund still lacked some \$500,000 of the three-million-dollar goal. With the present schedule holding, the new stadium should be completed by August 1959, in time for Navy to play the season's first home game.

The new stadium, designed as a memorial to the Navy and Marine Corps, will replace the old, inadequate Thompson Stadium, which has been in use at the Naval Academy since 1912.

Although the fund-raising campaign was started only a year ago, the new stadium has been in the

planning stage some 18 years. The stadium site, 101 acres of land bordering on Taylor Avenue in Annapolis, Md., was purchased by the Naval Academy Athletic Association in 1939. World War II halted the project until the present Superintendent of the Naval Academy proposed to renew the stadium efforts last year.

There are no government funds for construction of such a project. All funds for the 28,000-seat stadium are being raised through contributions by individuals and organizations throughout the country. However, as always, service personnel and friends of the service are swelling the Stadium Fund coffers to the point where it is almost in the downhill stretch.

General Line and Science Programs Outlined at Naval Postgraduate School

Starting in July the General Line School will become known as the General Line and Naval Science School but will remain a part of the Postgraduate School in Monterey, Calif.

The newly designated school will have two educational programs—the Bachelor of Science Program and the General Line Program.

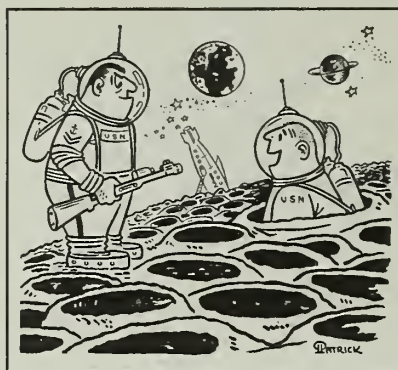
Bachelor of Science Program

This program will open its doors in August to 48 selected officer students. It will offer both academic and professional education. The course leads to the degree of Bachelor of Science (Undesignated) for those who successfully complete it. The curriculum is specifically tailored to meet the needs of the Navy and the academic requirements of individual students qualifying for the Five Term College Training Program.

The program will continue to offer the professional General Line courses prescribed for line officers who have three to seven years' commissioned service. In addition, the enlarged curriculum will offer courses in the scientific-engineering and social-humanistic areas which will be sufficient to support a fully accredited baccalaureate degree.

Although the new program is being staffed at the present time to accommodate approximately 50 officer students a class, it is anticipated that it may eventually educate all officers eligible for the Five Term College Training Program which was established by BuPers Inst. 1530.48 Series.

To be eligible for admission as a candidate for the Bachelor of Science program, you must have a minimum of 45 semester hours of acceptable college credits, or its equivalent. Credits earned from an accredited college, USAFI courses, correspondence courses, extension courses, or service schools may be submitted for evaluation. At least 18 of the 45 credits you offer must be in the required area of the curriculum. The remaining 27 semester hours of credit may be in general college level courses. But you will get no advance credit for any course in which your final grade was less than "C."



"O boy! . . . Ready-made foxholes!"

Once you are admitted to the General Line and Naval Science School, you will have your academic and service background reexamined and advance credits reevaluated. As a result of this examination you might find it necessary to take certain refresher courses without credit in order to prepare yourself for more advanced courses. Most students will require two to two-and-a-half years of study to complete work for a degree.

In January of this year, the Chief of Naval Personnel convened a board to select officers for the August class. Orders for those selected to attend the first class have already been issued. Future selections will be by administrative action of the Chief of Naval Personnel. All applicants to the Five Term College Training Program who need professional education will be considered.

General Line Program

If you haven't completed a normal sea duty tour since being commissioned, your chances of getting into this program are pretty slim. But if you have completed a normal sea tour, and have three to seven years' commissioned service, this nine-and-a-half month course will help you prepare for more responsible duties in the operating forces. This program is designed for unrestricted line officers.

Here is the priority to be given for this program:

- Officers commissioned without having had midshipman training who have not attended postgraduate instruction.
- Officers commissioned without midshipman training who have attended postgraduate instruction.
- Officers commissioned upon

successful completion of midshipman training.

Further information regarding courses and how you can establish qualifications for exemption can be found in BuPers Inst. 1415.1 and 1520.43A.

Pointers on Correspondence Courses for Officers Headed for Promotion

It's quite possible that, when you enter the selection zone for promotion, you may find courses which you need for promotion examination exemption are delayed in reaching you or are not available. It has happened to others and, quite possibly, may happen to you. Here are a few suggestions (from the Bureau's Training Division) that may help you avoid this embarrassing situation:

• Plan your course program.

BuPers Inst. 1416.1C lists the courses for your rank and designator and the *List of Training Manuals and Correspondence Courses*, NavPers 10061-G, gives the number of assignments for each course. For most courses administered by the Correspondence Course Center, you may plan on approximately six working hours to complete each assignment. With this information, you can roughly estimate how long it will take to finish the course program.

• Apply for courses early.

Don't wait until you are in the selection zone to apply for courses. There may be a temporary shortage of course material or mail may be delayed. Course materials are sent by surface mail and may be delayed in reaching you because of changes in your duty station or your location. Allow plenty of time for such eventualities.

• **Complete your assignments on time.** You may submit assignments as soon as they are completed, but you *must* submit at least one assignment per month to satisfy requirements established by the Bureau of Naval Personnel. Failure to meet Bureau requirements may result in disenrollment. This will entail additional time for reenrollment.

• **Where time is of the essence, apply for more than one course.** Normally, students are not encouraged to apply for more than one course at a time. But under certain circumstances, for example, changes

in duty station which might result in delayed mail, students may apply for more than one course. Remember, however, that requirements for submission of assignments remain unchanged.

• **List an alternate course on your application form.** NavPers Form 992 (Rev 10-54 or later) has spaces for listing a first and second choice. List a second choice so that you will have a course to work on if you cannot get your first choice. This will save time in filling out another application and waiting for the course.

In short, you are responsible for planning and completing your own course program. Plan your study program early to allow for possible delays in getting courses. Complete assignments on time, and don't wait until you are in the selection zone before you apply for courses.

Advancements to CPO Will Be Made in Five Increments

The Chief of Naval Personnel has authorized 3381 advancements to Chief Petty Officer in five increments, as a result of the February 1958 servicewide examinations.

These advancements will fulfill the current and projected personnel requirements for the ensuing year. The number of advancements that can be authorized depends upon the number of personnel who transfer to the Fleet Reserve, retire or are discharged from the naval service. The failure of eligible personnel to request transfer to the Fleet Reserve have reduced the requirements for CPO advancements this year.

Also reducing the need for new chiefs has been the reduction in forces and budgetary limitations. Consequently the number advanced to CPO as a result of the 1958 examinations is considerably less than in 1957.

However, it is contemplated that when final action on the proposed pay bill is completed, requests for retirement and transfer to the Fleet Reserve will return to normal. This will be reflected by increased advancements as a result of the February 1959 examinations.

Sixty-nine of this year's advancements will be effective on 16 May 1958; 856 on 16 Jul 1958; 839 on 16 Sep 1958; 820 on 16 Nov 1958; and 797 on 16 Jan 1959.

HOW DID IT START

Depth Charges

Depth charges are about the oldest anti-submarine weapon of them all, yet they are still an important part of the ASW picture.

Developed by the British in World War I, they first went into action in the summer of 1916, about the same time as the hydrophone. The "ash cans" (called that because of their appearance) and the new listening device gave sub-hunting ships their first fairly effective means of locating and destroying enemy subs underwater. The first successful depth-charge attack was made on the night of 6 Jul 1916 against the minelaying submarine UC-7. A British patrol craft was credited with the kill.

Before long other nations—among them the United States, Russia and Germany—had gone into the ash can business. And, even though depth-charge attacks weren't always successful, they did cause considerable wear and tear on the submariner's morale. For instance, on 6 Sep 1918 practically the entire crew of one German U-boat shot themselves to death one-by-one during a prolonged depth-charge attack by American sub chasers.

One of the big troubles with the early depth charges was that there just weren't enough to go around. In early 1917 British destroyers were only allotted four of them — two filled with 300 pounds of TNT and two containing 120 pounds. However, by the end of that year the allowance rose to 20 to 30 for each DD. It was estimated that they could destroy a submarine within 14 feet and damage one within 28 feet. As with modern depth charges, this destruction or damage was caused by a tremendous pressure wave generated by an explosion. Because water cannot be compressed, this wave strikes the hull of a submarine like a weight of hundreds of tons.

By the end of World War I there were two principal methods for launching depth charges. One was to roll them off the fantail from an inclined rack much like those still carried today on the latest destroyers. This system was quite effective for covering the area beneath an attacking ship, but by itself it didn't permit a wide enough drop pattern. So, to spread out the pattern (thus increasing the chances for a kill) the Y-gun was developed. This handy item, which could simultaneously hurl charges about 50 yards out to port and starboard, came along in 1917.

After World War I depth charges didn't receive very much attention. There were a few minor advances during the 1920s and '30s, but there weren't any major ones until the Second World War. The



first of these was the K-gun, which began to replace the Y-gun in 1941. This piece of equipment could be installed along a ship's topsides as needed and didn't interfere with a ship's gear the way the Y-gun had. Thus, more effective patterns were made possible.

So far as the depth charge itself was concerned, there wasn't much change in the old World War I style ash can until 1943, when the Bureau of Ordnance perfected the streamlined Mark 9 model. Capable of sinking faster and straighter than the old cylindrical charges, and packed with "torpex" instead of TNT, the Mark 9 considerably improved the effectiveness of a depth-charge attack.

The Mark 9, still carried aboard some ships today, is equipped with a hydrostatic fuse not much different from those used on the earliest depth charges. This ingenious mechanism can be preset to detonate the charge when it reaches a certain depth. The fuse "knows" from water pressure when it has gone down far enough.

Since the advent of the Mark 9 other types of fuses have also been developed. These, plus modern sonar, have helped remove much of the guesswork that a depth-charge attack formerly involved.

Today, although most of the depth charges developed during World War II still meet the Navy's needs, development of new types is not being ignored. For example, the experts are now working on one lightweight depth charge for use by patrol craft and picket boats against small sneak craft; and another, so light it can be thrown like a grenade, to deter frogman attacks on harbor defense installations or anchored ships.

The emphasis nowadays may be on antisubmarine rockets, torpedoes and nuclear depth bombs, but there's still plenty of room for the depth charge in the ASW picture.

Roundup on Officer Candidate School Programs Open to You

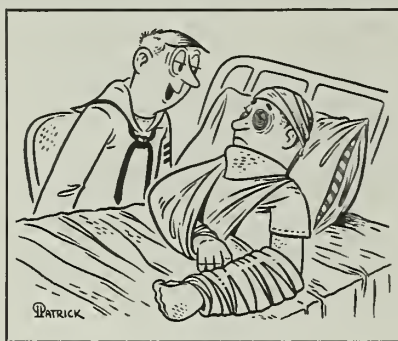
IF YOU ARE a college graduate on active duty and have been wondering how to go about applying for a commission in the Navy, this article is for you. It covers the different officer candidate school programs that are available to those who wish to become an officer.

The *Officer Candidate (OC) Program* provides a course of training for selected college graduates leading to a commission as a Reserve Officer in the line, restricted line, or staff corps. Selected enlisted applicants are designated as officer candidates within their present pay grades, but not lower than E-2.

The *Aviation Officer Candidate (AOC) Program* is for selected college graduates who meet the requirements for flight training. Selected enlisted applicants are designated as aviation officer candidates within their present pay grades, but, like the OCs, not lower than E-2. AOCs who successfully complete the four months' officer indoctrination course, if qualified, are commissioned as Reserve Officers. Upon successful completion of flight training in a commissioned status, they are designated as Naval Aviators.

The eligibility requirements for all phases of these programs are as follows. Detailed requirements for the individual programs can be found in BuPers Inst. 1120.29:

- Must be a citizen of the United States. (Applicants for naval intelligence, air intelligence/photographic intelligence, or naval security group duties must be citizens by birth.)
- Must be a graduate of an accredited college or university with a baccalaureate degree with a minimum of 120 semester hours or its equivalent.
- Must be physically qualified in accordance with standards contained in the Manual of the Medical Department.
- Must be on active duty at a permanent-duty station and must have been serving on that station for at least two months. (Naval Training Centers for recruits and service schools of two months or more in duration for eligible qualified enlisted men and women are considered permanent-duty stations for these programs.)
- Must have at least six months



"How was your leave?"

of obligated service remaining under current enlistment upon receipt of orders to the school. If you have less than six months remaining, you are authorized to extend or reextend your enlistment. But the agreement to extend must be executed before you are transferred to the school.

Here is a rundown on the various programs:

Officer Candidate School Program (Men)

This program is open to all enlisted men—Regular Navy and Naval Reservists on active duty. Successful candidates will become Ensigns in the Line, Staff Corps and Restricted Line, with a very limited number of LTJG commissions available in the Restricted Line and Medical Service Corps.

Men selected for the Officer Candidate School will be ordered to report to the U. S. Naval Schools Command, Newport, R. I., for a four months' indoctrination course. (There is an exception to this. If you are selected for Aviation Experimental Psychology, you will receive your indoctrination at the U. S. Naval Air Station, Pensacola, Fla.)

If you successfully complete the indoctrination course, you will be appointed Ensign, USNR. A limited number of qualified candidates may be appointed in the grade of LTJG in the restricted line, and Medical Service Corps.

Line officers will be ordered to appropriate billets. But staff corps and restricted line officers will be given additional training under the supervision of the cognizant bureau or office.

You will be required to serve on active duty in commissioned grade for three years from the date you

accept your appointment, if required by the needs of the service, and to retain your commissioned status in the Naval Reserve for a total of six years following the date of your original appointment.

Officer Candidate School Program (Women)

Enlisted women of the Regular Navy and enlisted women Reservists on active duty are eligible to apply for this program leading to commissions as Ensign or LTJG in the Line (1105) or Staff Corps (3105).

Women selected for the Officer Candidate School will be ordered to the U. S. Naval School, Officer, Women, U. S. Naval Schools Command, Newport, R. I., for eight weeks of officer candidate training.

When you successfully complete the course, you will be appointed Ensign, USNR, in the line, Supply Corps or Medical Service Corps. A limited number may be appointed to LTJG in the Medical Service Corps or the line.

Classes for this program convene in July, November, and March of each year. The deadlines for receipt of applications in this Bureau for each class will be 10 May, 10 September, and 10 January. If your application is received after the deadline date, it will automatically be considered for the next class.

Aviation Officer Candidate School Program

This program, open to enlisted married or single men in the Regular Navy and Reservists on active duty, leads to a commission of Ensign.

When selected to this school, you will be ordered to the Aviation Officer Candidate School, Naval Air Station, Pensacola, Fla., for four months' indoctrination and preflight training.

Upon completion of the course and preflight training, you will be appointed Ensign, USNR. After being appointed, you will undergo approximately 14 months of flight training leading to the designation of Naval Aviator.

Upon successful completion of flight training, you will be obligated to serve on active duty in a commissioned rank for a period of three-and-a-half years, if required by the needs of the service, from the date of completion of flight training.

You will be further obliged to retain your commissioned status in the Naval Reserve for a total period of six years from the date of original appointment. This will include your period in flight training.

Processing Procedures

Here are the procedures for processing applications for all programs:

- You must make a written request to your commanding officer showing a desire for appointment to commissioned grade.
- Your commanding officer will make the initial review of your qualifications.
- You must take a physical examination.
- You will have to take mental tests prescribed for the program for which applying, and attain acceptable scores.
- Your application file will be assembled.
- You will be interviewed by a board of officers.
- Your commanding officer will review your completed application file.
- Your commanding officer will make his forwarding endorsement on your application.

Change of Rate

You will report to the appropriate school in your present rate. After reporting, the commanding officer of the school will have your rate changed to "Officer Candidate (OC)" or to "Aviation Officer Candidate (AOC)" in your present pay grade. As an example, a YN2 reporting to OCS would become an OC2, USN or USNR. A YN2 reporting to AOC would become an AOCNCP (E-5), USN or USNR.

Disenrollment

If you fail while at the school, you will be reverted to your former rate in the Regular Navy or Naval Reserve and made available for general assignment. Reverted candidates will be required to serve out their original or extended period of obligated service or such other period as may be required by the Secretary of the Navy pursuant to law. However, if you are unsuccessful and you would normally be released to inactive duty, you may, if you so desire, sign an agreement to remain on active duty.

Unsuccessful OCS candidates may reapply for an OC program, or for AOC program, after one year following the date of their disenrollment.

Unsuccessful AOCs in preflight may reapply for the program after one year following the date of their disenrollment, if the disenrollment is not the result of flight failure.

Dependents

Since the course of instruction at the officer candidate school at Newport is of less than 20 weeks' duration, transportation of dependents and household effects at government expense is not authorized. And if you are thinking of doing it at your own expense, remember, you are going to school to study. Besides, there is insufficient housing at Newport.

NOW HERE'S THIS

Knows When to Run

A naval officer in Bakersfield, Calif., has written a letter to the Commandant of the Eleventh Naval District which seems to be pretty convincing proof of that old adage about the ill wind. He says:

"The writer was recently informed by a friend, who wishes to remain anonymous, but whose integrity is unimpeachable, of the following effect of a sonic boom:

"The wife of this man possesses a small French clock, which she has kept on her dressing table for sentimental and ornamental value only, because it has not run for some years. But, when a sonic boom recently struck this area the clock started. It has now been running and keeping good time for several weeks.

"Since most of the publicity about the sonic boom concerns the deleterious effects, it was felt that the Commandant would be interested to learn of a beneficial result of the boom, even though the plane which caused it has not been identified. However, it is considered neither desirable nor feasible to use supersonic service aircraft solely for the purpose of starting clocks."

The officer's concluding remark is regarded as jets a suggestion.



Things are different for those going to Aviation Officer Candidate School, Pensacola, Fla. If you are entitled to dependents' travel as authorized in *Joint Travel Regulations* and *Naval Travel Instructions*, you are authorized to bring your dependents to Pensacola at government expense.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 6—Announced the first successful flight of the Vanguard test satellite and extended congratulations to all hands concerned.

No. 7—Restricted the distribution of certain canned goods.

No. 8—Stated that applications are desired from officers with 1100 designators in grades from lieutenant through commander for new post-graduate curriculum sponsored by MSTs.

No. 9—Restricted the issue and use of certain drugs.

No. 10—Announced the convening of a selection board to consider the promotion of USN warrant officers.

No. 11—Required that all commands take action to implement the 11 Apr 1958 decision of the court of military appeals.

Instructions

No. 1301.3—Discusses the distribution of 11XX and 17XX officers based on the numbers of officers of each grade available for detailing.

No. 1326.1B—Establishes a uniform procedure for the administration of the allocation, issue, use and reporting of temporary flight orders for Navy enlisted personnel.

No. 1520.43A—Redesignates the General Line School as the General Line and Naval Science School and

provides information concerning the two programs which it offers.

No. 1520.61—States the policy concerning the participation of commissioned officers (naval and Marine Corps) and midshipmen in the annual Rhodes Scholarship competition.

No. 1620.1B—Sets forth the policies and procedures applicable to complaints of insufficient support and similar subjects affecting dependents of naval personnel.

No. 1820.2A—Provides information concerning the transfer to the Retired Reserve without pay of members of the Naval Reserve.

No. 1910.16—Authorizes one month early separation of enlisted personnel serving an active duty.

Notices

No. 1540 (17 March)—Announced Change No. 1 to BuPers Inst. 1540.2C, which is concerned with assignment of enlisted personnel to submarine training and duty.

No. 1926 (18 March)—Announced Change No. 1 to BuPers Inst. 1926.1C, which is concerned with the extension of and release from active duty of Naval Reserve officers and certain USN officers.

No. 1742 (26 March)—Provided information for commanding officers and voting officers for the administration of the Absentee Voting Assist-

ance Program and outlined steps to be taken to encourage maximum participation.

No. 1120 (28 March)—Announced the selection of applicants for temporary appointment to the grade of ensign, USN, for limited duty officer and warrant officer W-1.

No. 1430 (28 March)—Listed the bibliography to be used in preparing for advancement in the Photographic Intelligence rating.

No. 1531 (28 March)—Requested nomination of candidates for assignment to the U. S. Naval Preparatory School, Bainbridge, Md., in preparation for appointment to the Naval Academy.

No. 1001 (3 April)—Provided information regarding selection for transfer to TAR status and assignment to duty in the TAR program.

No. 1520 (3 April)—Invited applications from Supply Corps officers for assignment to the Freight Transportation and Traffic Management Course, Oakland, Calif.

No. 1418 (4 April)—Announced the schedule for servicewide examinations for advancement in rating to pay grades E-4 through E-6 to be conducted in August.

No. 1306 (16 April)—Described use of codes in rotation and assignment of enlisted personnel.

No. 1440 (17 April)—Announced the disestablishment of certain MM emergency service ratings.

No. 1520 (17 April)—Announced the selection of officers for the July 1958 submarine class and announced eligibility for the January 1959 class.

No. 1540 (17 April)—Made available information regarding Diver, First Class, training.

Atlantic Fleet Welcomes New Piers Joining the Navy

Three new piers have moved into the Navy's picture—two are in use and the other is well along the way.

On 14 February, the 60,000-ton supercarrier *uss Ranger* (CVA 61) moved alongside Pier 12, the Norfolk Naval Base's newest and largest berthing space.

This huge pier is 1300 feet long and 150 feet wide. It is the first of three planned docking facilities to be added to the north end of the base. Construction of the project, authorized by Congress, began in May 1956.

In addition to filling 102 acres of new land for the pier complex, Navy constructors put in a 3200-foot bulkhead and a 1500-foot breakwater at the end of the new land.

Further up the Atlantic seaboard, in Newport at Coddington Cove, R. I., work continues on the largest Navy-built pier on the Atlantic Coast. The last of 3182 steel pilings were pounded into the waters last fall as one more step toward completing the 1530-foot Pier Two.

The 200-foot wide structure will be big enough to accommodate 26 destroyers and two destroyer tenders. It lies 800 feet north of Destroyer Pier One completed in 1956.

The new pier will not be just a place to moor. On it will be a complete marine terminal building, 860 feet long by 100 feet wide. The building will include covered storage space, administrative offices, a snack bar, waiting rooms, a telephone center and a film exchange.

Another important feature is that utilities will be built into the new pier. Ships alongside will be able to get electric light and power, telephone connections, water, fuel and steam without running their own plants.

As the finger of Destroyer Pier Two extends further and further

U. S and Canadian Fleets Team Up for ASW

ASW units from the U. S. Atlantic and Canadian Fleets teamed up this spring for two weeks of antisubmarine operations off the coast of Florida.

Dubbed "ASWEX," the exercise was designed to provide training in defense against nuclear-powered and conventional submarines. It was conducted under the over-all direction of VADM Frank T. Watkins, usn, Commander Antisubmarine Defense Force, U. S. Atlantic Fleet.

The operation was divided into two phases—the first, dealing with the support of convoy operations, and the other with hunter-killer operations centered around the antisubmarine support carrier and land-based patrol planes.

Acting as the "enemy" during the operation was the New London-based atomic submarine *uss Sea-*

wolf, SS(N) 575; and *uss Trumpetfish* (SS 425) and *uss Clamagore* (SS 343), both based at Key West, Fla.

Teamed-up against the underseas raiders were 34 surface ships, carrier- and land-based aircraft, and blimps. More than 10,000 naval personnel took part in this, the first large-scale antisubmarine warfare operation held by the Atlantic Fleet this year.

Taking part in ASWEX were the antisubmarine carriers *uss Leyte* (CVS 32) and *HMCS Bonaventure*; the frigate *uss Mitscher* (DL 2); Destroyer Squadrons 20 and 28; Escort Squadrons 10 and 14; the Canadian Escort Squadrons One and Three; the ammunition ship *uss Suribachi* (AE 21); the refrigerator ship *uss Denebola* (AF 56); Patrol Squadron Five and Airship Squadron Two.

This Is Lowdown on Transportation for Man's Best Friend

I'm about to be transferred overseas, writes W.E.W., AC1, and the youngsters insist on taking the dog along. I'm all for it, but not so sure it can be done. Can you give us the latest word concerning the shipment of a dog—or for that matter—any pet? Can our Hero (and I didn't name it—the kids did) travel with the family or does (if he goes at all) he have to travel in the baggage? How about travel by air? Can dogs be shipped on a space available basis?

LET THERE BE peace in your family. You can take him with you—under certain conditions, of course. The rules say you may ship your dog if you are authorized travel at government expense in connection with a permanent change of station. To become technical for a moment, he may be shipped "from an appropriate port of embarkation to the port serving your overseas duty station, between ports serving your overseas duty station, or from the overseas port of embarkation" to the appropriate continental United States port, providing there is no cost to the government.

Hero can be shipped provided he (or she) falls into the category of a household pet which is kept for personal enjoyment and not intended for resale or commercial purposes. Household pets are usually defined as dogs, cats and certain birds including canaries and java sparrows. Birds of the parrot family cannot be shipped. Monkeys may be considered as household pets but, pet or not, you'll have to leave your elephant at home.

Hero cannot be shipped via government aircraft. He may be transported only on a passenger ship of the Military Sea Transportation Service. Pets transported

aboard MSTS ships are limited to those which can be placed in installed cages or portable crates that can be stowed in areas designed for that purpose. The space allotted for pets is usually on the weather deck. Cats and dogs are not permitted in staterooms. Birds may be kept in your quarters, but you will be responsible for their care.

The number of pets which can be carried aboard any MSTS ship is controlled by the master of the vessel. The movement of pets may be further restricted by military departments and/or overseas commanders for reason dictated by circumstances. Some of the pamphlets about living conditions overseas contain brief items about shipping pets. These pamphlets may be obtained from the Chief of Naval Personnel (Attn: Pers G221) for the areas in which you are interested.

While transportation aboard MSTS ships is furnished, all costs for food and care after delivery to the port of embarkation, during the voyage, and after arrival at the port of debarkation must be paid by you.

Before you can ship your pet, you must fulfill the following requirements:

- Sign a statement of agreement and provide a certificate that you have taken the necessary steps to insure that your pet satisfied the import requirements of the United States or other country that you plan to enter.

- Furnish proof that your pet has been thoroughly examined by a registered veterinarian within two weeks of sailing and found to be free of any sickness or disease.

- Provide a suitable crate or cage, food for the voyage and proper utensils for feeding and watering, which can be easily

cleaned and are resistant to rust and corrosion.

- Properly tag the crate with your identification and deliver it to the loading port one day before loading. (Delivery to the port of embarkation will be at your expense.)

- Provide a suitable collar or harness, muzzle, and chain or leash for your dog. You must accompany Hero at the time of embarkation. He must be on a chain or leash and muzzled at the time of embarkation and debarkation, and during exercise periods at sea.

- Arrangements for care ashore, boarding, clearance, transportation to and from the port, consignment, and other pre-embarkation and post-debarkation requirements will be your sole responsibility and expense.

- An application must be submitted in advance to the Commandant of the appropriate Naval District for complete shipping information, before delivering Hero to the port of embarkation.

In spite of the pleasure you and your family may receive from Hero, the expense, inconveniences and restrictions which are involved in his transportation should be considered before you decide to take him with you. (We're aware there will be certain unpleasant repercussions if you decide to leave him, but that's your problem. Are you man or mouse?) You might also consider that there are certain quarantine restrictions placed on animals imported into various countries. The cost for the care and feeding while in quarantine must be borne by you.

You should also know that the government is not responsible for the physical well-being of Hero or any other pet while in its custody and is not liable for injury or loss.

seaward, destroyermen welcome the sight and realize that those long liberty boat rides in icy weather will be coming to an end.

Across Narragansett Bay at the Naval Construction Battalion Center, Davisville, R. I., the Bureau of Yards and Docks has completed a pier of a different type. It will provide addi-

tional berthing space for loading personnel and cargo destined for overseas projects being built by the Navy's Seabees.

This pier is 1200 feet long with a 250-foot wide paved strip extending 600 feet across its seaward end. The rest of the pier is 500 feet wide.

The berthing facility is built of

cellular (steel sheet piling) construction with hydraulic fill obtained from a 3000-foot channel dredged to deep water. A railroad spur running the length of the paved section is reinforced with steel H-piles. In addition to the spur the pier has facilities for water distribution, electrical power and lighting service and telephones.

BOOKS

SEA TALES AND ADVENTURE IN THIS MONTH'S CHOICE

THE SALTY TOUCH of the under-seas Navy is predominant in this month's Navy Library selections. But there are also adventure yarns that are sure to be popular.

The Enemy Below, by Commander D. A. Rayner, RN. This book, which is now available with the hard cover, will soon be ready for distribution as a paper back. It is a compactly written novel concerning a single combat engagement in a desolate part of the Atlantic, between enemy ships—a destroyer and a submarine—captain vs Kapitan, men of equal skill and determination.

Symbolically, the Captain of the British destroyer "*Hecate*" is playing chess when his radar alerts him to a submarine ahead. Almost simultaneously the kapitan of the German submarine is warned of what seems a false echo trailing him to his goal, the armed cruiser "*Cecile*."

The British captain's deadly calculations are based on exact knowledge of how and why a U-boat will maneuver, how and where her radar can detect the echo as another boat, under what circumstances she can place her torpedo. The German, accustomed to the illogic of the enemy, cannot believe it is a real menace, but his instincts too are sound, and eventually a depth charge from "*Hecate*" and a torpedo from *U-121* precipitate the absolute battle of absolute equals which is played out to a violent and startling conclusion.

Fire On The Beaches, by Theodore Taylor. Pearl Harbor found both the east and west coasts of this country almost without defense and with no means of countering submarine attacks, which had already begun in

the Atlantic and which started in the Pacific 7 Dec 1941. All during 1942 German wolf-packs and the fewer Japanese submarines roamed the seas almost at will, striking down an incredible number of merchant ships, killing thousands of seamen and passengers, until convoy escort, our own submarines and the air arm at last put an end to the menace.

Fire On The Beaches tells the story of German and Japanese submarine warfare against American merchant shipping in the last war. It is one of heroism, frustration, defeat and victory, with little emphasis on horrors or on the obvious moral. It should appeal to readers of modern American history and delight those who enjoy true tales of adventure and heroism on the high seas.

U-Boat Killer, by Captain Donald Macintyre, RN. This book, too, will soon be available for distribution as a paper book. It is a first-hand account of the "hunt for, the stalking of and the finally killing of a U-boat" which, to the author, is the "perfect expression of a fighting sailor's art" with a minimum of dramatics and a maximum of modesty. His ships, *Bickerton*, a tiny can, *Hesperus*, an aristocrat, and *Walker*, an old warhorse, and his men are very much a part of his story of life with the convoys, of the evasive and attacking tactics developed against the submarines, of changing phases of the war at sea.

Victory At Sea 1939-1945, by LCDR P. K. Kemp, RN(Ret.). This book is based on documents and records, allied and enemy, and written with the approval of the British Admiralty, the Admiralty Archivist and Head of Historical Section. It provides a running account of World War II's sea war and an over-all survey of campaigns and actions and major naval operations as they "fitted into, and in their outcome influenced, the major strategical pattern."

It tells about the decline of the British Navy after World War I, the lateness in reactivating and the status when war struck.

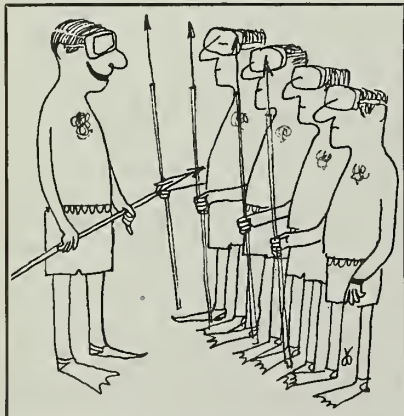
Here are the attempts to hold the sea ring of safety against the enemy, the penetration of the U-boats, and the hard fought battle of the Atlantic

with its long toll of losses, and the two "happy times" of the Germans.

Escape Of The Amethyst, by C. E. Lucas Phillips. In 1949, as H.M.S. frigate *Amethyst* proceeded peacefully up the River Yangtze she was unknowingly sailing to fame as the cause of an international incident and the subject of an epic in naval history. Brought to the brink of destruction when a Chinese Communist shore battery illegally opened fire, *Amethyst* and her novice crew were held captive under incredible conditions of physical hardship and emotional tension.

They Came To Cordura, by Glendon Swarthout. An almost forgotten segment of our military history provides the substance for this story of Pershing's punitive expedition into Mexico, when the bandit Villa was terrorizing the border. The time was 1916; the American forces were undermanned, badly equipped, inexperienced in guerrilla warfare—and outnumbered and outmaneuvered by the Villistas.


Shackleton And The Antarctic, by Margery and James Fisher. At the turn of the century, the South Pole had the emotional value now attached to Everest, and the man who penetrated its reaches, Ernest Shackleton, was hailed as a hero and knighted. He has been the subject of biographies earlier than this one in an attempt to discover what it is that makes an adventurer. Anxious to leave no facet of the man's life unrecorded and unexplained, Margery and James Fisher have amassed documents and letters touching on every phase of the Irish-born explorer's life. The authors bring to light Shackleton's motives in undertaking the polar journeys; what he was like at home, under command and in command.



"Seventeeeen count manual. . ."



"Didja learn any new words from the D.I. today?"



introduction to SPACE

A few days after the first Vanguard was successfully launched, the following report, *Introduction to Outer Space*, which had been prepared by the Science Advisory Committee to the President, was made public. It's something of a blueprint of the future, expressed in nontechnical language. Because it helped answer a lot of our own questions, ALL HANDS presents it here in somewhat abbreviated form in the hope it will also help you answer some of your questions.

THE BASIC LAWS governing satellites and space flight are fascinating in their own right. And while they have been well known to scientists ever since Newton, they may still seem a little puzzling and unreal to many of us. Our children, however, will understand them quite well.

We all know that the harder you throw a stone the farther it will travel before falling to earth. If you could imagine your strength so fantastically multiplied that you could throw a stone at a speed of 15,000 mph, it would travel a great distance. It would, in fact, easily cross the Atlantic Ocean before the earth's gravity pulled it down. Now imagine being able to throw the stone just a little faster, say about 18,000 mph. What would happen then?

The stone would again cross the ocean, but this time it would travel much farther than it did before. It would travel so far that it would overshoot the earth, so to speak, and keep falling until it was back where it started. Since in this imaginary example there is no atmospheric resistance to slow the stone down, it would still be traveling at its original speed, 18,000 mph, when it got back to its starting point. So around the earth it goes again. From the stone's point of view, it is continuously falling, except that its very slight downward arc exactly matches the curvature of the earth, and so it stays aloft—or as the scientist would say, "in orbit"—indefinitely.

Since the earth does have an atmosphere, of course, neither stones nor satellites can be sent whizzing around the earth at tree-top level. Satellites must first be lifted

beyond the reach of atmospheric resistance. It is the absence of atmospheric resistance that makes the satellite possible. It may seem odd that weight or mass has nothing to do with a satellite's orbit. If a feather were released from a 10-ton satellite, the two would stay together, following the same path in the airless void.

There is, however, a slight vestige of atmosphere even a few hundred miles above the earth, and its resistance will cause the feather to spiral inward toward the earth sooner than the satellite. It is atmospheric resistance, however slight, that has set limits on the life of all satellites launched to date.

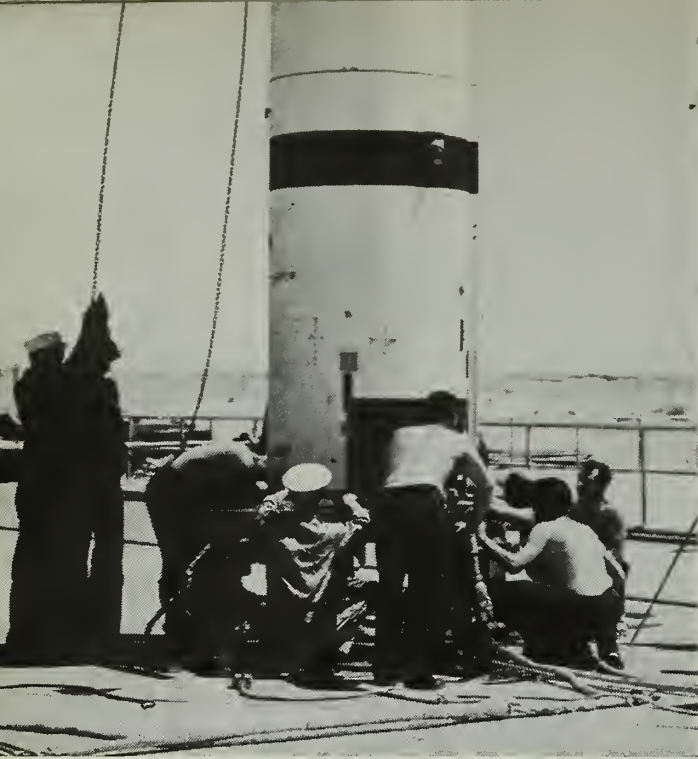
Beyond a few hundred miles the remaining trace of atmosphere fades away so rapidly that tomorrow's satellites should stay aloft thousands of years, and, perhaps, indefinitely. The higher the satellite, incidentally, the less speed it needs to stay in orbit once it gets there (thus, the moon's speed is only a little more than 2000 mph), but to launch a satellite toward a more distant orbit requires a higher initial speed and greater expenditure of energy.

The Thrust into Space

Rocket engineers rate rockets not in horsepower, but in thrust. Thrust is just another name for push, and it is expressed in pounds of force. The rocket gets its thrust or push by exhausting material backward. It is this thrust that lifts the rocket off the earth and accelerates it, making it move faster and faster.

As everyone knows, it is more difficult to accelerate an automobile than a baby carriage. To place satellites weighing 1000 to 2000 pounds in orbit requires a first-stage rocket, engine, or engines, having a thrust in the neighborhood of 200,000 to 400,000 pounds. Rocket engines able to supply this thrust have been under development for some time.

For launching a satellite, or other space vehicle, the rocket engineer divides his rockets into two, three, or more stages, which can be dropped one after the other



'SPACE PIONEER'—Navy Viking rockets like one being readied here, were stepping stones to satellite launching.

in flight, thus reducing the total weight that must be accelerated to the final velocity desired. (In other words, it is a great waste of energy to lift one huge fuel tank into orbit when the tank can be divided into smaller tanks—each packaged in its own stage with its own rocket motor—that can be left behind as they become empty.)

Weight Limiting Factor—To launch some of the present satellites has required rockets weighing up to 1000 times the weight of the satellite itself. But it will be possible to reduce take-off weights until they are only 50 to 100 times that of the satellite. The rocket's high ratio of gross weight to payload follows from a fundamental limitation in the exhaust velocities that can be achieved by chemical propellants.

If we want to send up not a satellite but a device that will reach the moon, we need a larger rocket relative to its payload in order that the final stage can be accelerated to about 25,000 mph. This speed, called the "escape velocity," is the speed with which a projectile must be thrown to escape altogether from the gravitational pull of the earth. If a rocket fired at the moon is to use as little fuel as possible, it must attain the escape velocity very near the beginning of its trip. After this peak speed is reached, the rocket will be gradually slowed down by the earth's pull, but it will still move fast enough to reach the moon in two or three days.

The Moon as a Goal

Moon exploration will involve three distinct levels of difficulty. The first would be a simple shot at the moon, ending either in a "hard" landing or a circling of the moon. Next in difficulty would be a "soft" landing. And most difficult of all would be a "soft" landing followed by a safe return to earth.

The payload for a simple moon shot might be a small instrument carrier similar to a satellite. For the more difficult "soft" landing, the carrier would have to include, as part of its payload, a "retro-rocket" (a decelerating

rocket) to provide braking action, since the moon has no atmosphere that could serve as a cushion.

To carry out the most difficult feat—a round trip to the moon—will require that the initial payload include not only "retro-rockets" but rockets to take off again from the moon. Equipment will also be required aboard to get the payload through the atmosphere and safe back to earth. To land a man on the moon and get him home safe again will require a very big rocket engine indeed—one with a thrust in the neighborhood of one or two million pounds. While nuclear power may prove superior to chemical fuels in engines of multi-million pound thrust, even the atom will provide no short cut to space exploration.

Sending a small instrument carrier to Mars, although not requiring much more initial propulsion than a simple moon shot, would take a much longer travel time (eight months or more), and the problems of navigation and final guidance are formidable.

A Message from Mars—Fortunately, the exploration of the moon and nearby planets need not be held up for lack of rocket engines big enough to send men and instrument carriers out into space and home again. Much that scientists wish to learn from satellites and space voyages into the solar system can be gathered by instruments and transmitted back to earth. This transmission, it turns out, is relatively easy with today's rugged and tiny electronic equipment.

For example, a transmitter with a power of just one or two watts can easily radio information from the Moon to the earth. And messages from Mars, on the average some 50 million to 100 million miles away at the time the rocket would arrive, can be transmitted to earth with less power than that used by most commercial broadcasting stations. In some ways, indeed it appears that it will be easier to send a clear radio message between Mars and earth than between New York and Tokyo.

This all leads up to an important point about space exploration. The cost of transporting men and material through space will be extremely high, but the cost and difficulty of sending information through space will be comparatively low.

Will the Results Justify the Costs?

Since the rocket power plants for space exploration are already in existence or being developed for military need, the cost of additional scientific research, using these rockets, need not be exorbitant. Still, the cost will not be small, either. This raises an important question that scientists and the general public (which will pay the bill) both must face: Since there are still so many unanswered scientific questions and problems all around us on earth, why should we start asking new questions and seeking out new problems in space? How can the results possibly justify the cost?

Scientific research, of course, has never been amenable to rigorous cost accounting in advance. Nor, for that matter, has exploration of any sort. But if we have learned one lesson, it is that research and exploration have a remarkable way of paying off—quite apart from the fact that they demonstrate that man is alive and insatiably curious. And we all feel richer for knowing what explorers and scientists have learned about the universe in which we live.

It is in these terms that we must measure the value of launching satellites and sending rockets into space. These ventures may have practical utility, some of which will

be noted later. But the scientific questions come first.

The View from a Satellite

Here are some of the things that scientists say can be done with the new satellites and other space mechanisms. A satellite in orbit can do three things: (1) It can sample the strange new environment through which it moves; (2) it can look down and see the earth as it has never been seen before; and (3) it can look out into the universe and record information that can never reach the earth's surface because of the intervening atmosphere.

The satellite's immediate environment at the edge of space is empty only by earthly standards. Actually, "empty" space is rich in energy, radiation, and fast-moving particles of great variety. Here we will be exploring the active medium, a kind of electrified plasma, dominated by the sun, through which our earth moves. Scientists have indirect evidence that there are vast systems of magnetic fields and electric currents that are connected somehow with the outward flow of charged material from the sun. These fields and currents the satellites will be able to measure for the first time. Also for the first time, the satellites will give us a detailed three-dimensional picture of the earth's gravity and its magnetic field.

Physicists are anxious to run one crucial and fairly simple gravity experiment as soon as possible. This experiment will test an important prediction made by Einstein's General Theory of Relativity, namely, that a clock will run faster as the gravitational field around it is reduced. If one of the fantastically accurate clocks, using atomic frequencies, were placed in a satellite and if it should run faster than its counterpart on earth, another of Einstein's great and daring predictions would be confirmed. (This is not the same as the prediction that any moving clock will appear to a stationary observer to lose time—a prediction that physicists already regard as well confirmed.)

There are also some special questions about cosmic rays which can be settled only by detecting the rays be-

fore they shatter themselves against the earth's atmosphere. And, of course, animals carried in satellites will begin to answer the question: What is the effect of weightlessness on physiological and psychological functions? (Gravity is not felt inside a satellite because the earth's pull is precisely balanced by centrifugal force. This is just another way of saying that bodies inside a satellite behave exactly as they would inside a freely falling elevator.)

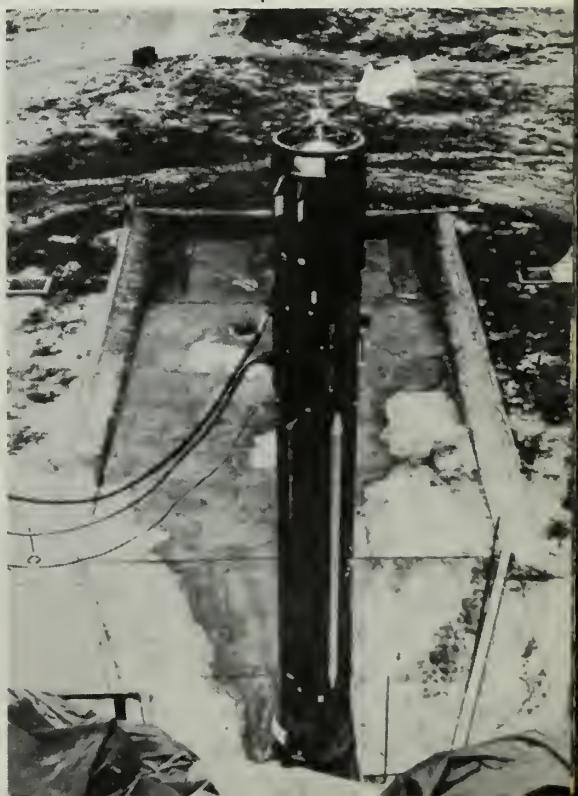
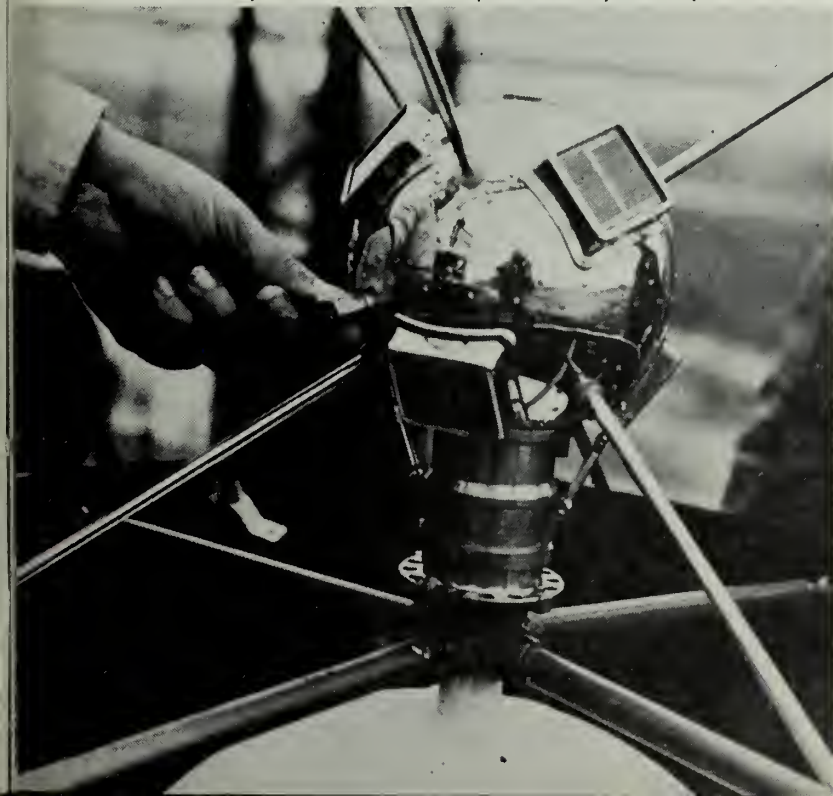
The satellite that will turn its attention downward holds great promise for meteorology and the eventual improvement of weather forecasting. Present weather stations on land and sea can keep only about 10 per cent of the atmosphere under surveillance. Two or three weather satellites could make a cloud inventory of the whole globe every few hours. From this inventory meteorologists believe they could spot large storms (including hurricanes) in their early stages and chart their direction of movement with much more accuracy than at present. Other instruments in the satellites will measure for the first time how much solar energy is falling upon the earth's atmosphere and how much is reflected and radiated back into space by clouds, oceans, the continents, and by the great polar ice fields.

It is not generally appreciated that the earth has to send back into space, over the long run, exactly as much heat energy as it receives from the sun. If this were not so the earth would either heat up or cool off. But there is an excess of income over outgo in the tropical regions, and an excess of outgo over income in the polar regions. This imbalance has to be continuously rectified by the activity of the earth's atmosphere which we call weather.

By looking at the atmosphere from the outside, satellites will provide the first real accounting of the energy imbalances, and their consequent tensions, all around the globe. With the insight gained from such studies, meteorologists hope they may improve long-range forecasting of world weather trends.

Finally, there are the satellites that will look not just

IN ORBIT—Navy's test satellite is squared away for trip. *Left:* Radio is turned on. *Rt:* It's positioned in rocket.





LOOKING BACK—Composite photo made by cameras in rockets shows what earth looks like from 100 miles up.

around or down, but out into space. Carrying ordinary telescopes as well as special instruments for recording X-rays, ultraviolet, and other radiations, these satellites cannot fail to reveal new sights forever hidden from observers who are bound to the earth. What these sights will be, no one can tell. But scientists know that a large part of all stellar radiation lies in the ultraviolet region of the spectrum, and this is totally blocked by the earth's atmosphere. Also blocked are other very long wave lengths of "light" of the kind usually referred to as radio waves. Some of these get through the so-called "radio window" in the atmosphere and can be detected by radio telescopes, but scientists would like a look at the still longer waves that cannot penetrate to earth.

Even those light signals that now reach the earth can be recorded with brilliant new clarity by satellite telescopes. All existing photographs of the moon and nearby planets are smeared by the same turbulence of the atmosphere that make the stars twinkle. Up above the atmosphere the twinkling will stop and we should be able to see for the first time what Mars really looks like. And we shall want a really sharp view before launching the first rocket to Mars.

A Close-Up of the Moon

While these satellite observations are in progress, other rockets will be striking out for the moon with other kinds of instruments. Photographs of the back or hidden side of the moon may prove quite unexciting, or they may reveal some spectacular new feature now unguessed. Of greater scientific interest is the question whether or not the moon has a magnetic field. Since no one knows for sure why the earth has such a field, the presence or absence of one on the moon should throw some light on the mystery.

But what scientists would most like to learn from a close-up study of the moon is something of its origin and history. Was it originally molten? Does it now have a fluid core, similar to the earth's? And just what is the nature of the lunar surface? The answer to these and many other questions should shed light, directly or indirectly, on the origin and history of the earth and the surrounding solar system.

While the moon is believed to be devoid of life, even the simplest and most primitive, this cannot be taken for granted. Some scientists have suggested that small particles with the properties of life—germs or spores—could exist in space and could have drifted on to the moon. If we are to test this intriguing hypothesis we must be careful not to contaminate the moon's surface, in the biological sense, beforehand. There are strong scientific reasons, too, for avoiding radioactive contamination of the moon until its naturally acquired radioactivity can be measured.

... And on to Mars

The nearest planets to earth are Mars and Venus. We know quite enough about Mars to suspect that it may support some form of life. To land instrument carriers on Mars and Venus will be easier, in one respect, than achieving a "soft" landing on the moon. The reason is that both planets have atmospheres that can be used to cushion the final approach. These atmospheres might also be used to support balloons equipped to carry out both meteorological soundings and a general photo survey of surface features. The Venusian atmosphere, of course, consists of what appears to be a dense layer of clouds so that its surface has never been seen at all from earth.

Remotely controlled scientific expeditions to the moon and nearby planets could absorb the energies of scientists for many decades. Since man is such an adventurous creature, there will undoubtedly come a time when he can no longer resist going out and seeing for himself. It would be foolish to try to predict today just when this moment will arrive. It might not arrive in this century, or it might come within one or two decades. So much will depend on how rapidly we want to expand and accelerate our program. According to one rough estimate it might require a total investment of about a couple of billion dollars spent over a number of years to equip ourselves to land a man on the moon and to return him safe to earth.

The Satellite Radio Network

Meanwhile, back at earth, satellites will be entering into the everyday affairs of men. Not only will they be aiding the meteorologists, but they could surely—and rather quickly—be pressed into service for expanding world-wide communications, including intercontinental television.

At present all trans-oceanic communication is by cable (which is costly to install) or by shortwave radio (which is easily disrupted by solar storms). Television cannot be beamed practicably more than a few hundred miles because the wave lengths needed to carry it will not bend around the earth and will not bounce off the region of the atmosphere known as the ionosphere. To solve this knotty problem, satellites may be the thing, for they can serve as high-flying radio relay stations. Several suitably equipped and properly spaced satellites would be able to receive TV signals from any point on the globe and to relay them directly—or perhaps via a second satellite—to any other point. Powered with solar batteries, these relay stations in space should be able to keep working for many years.

Military Applications of Space Technology

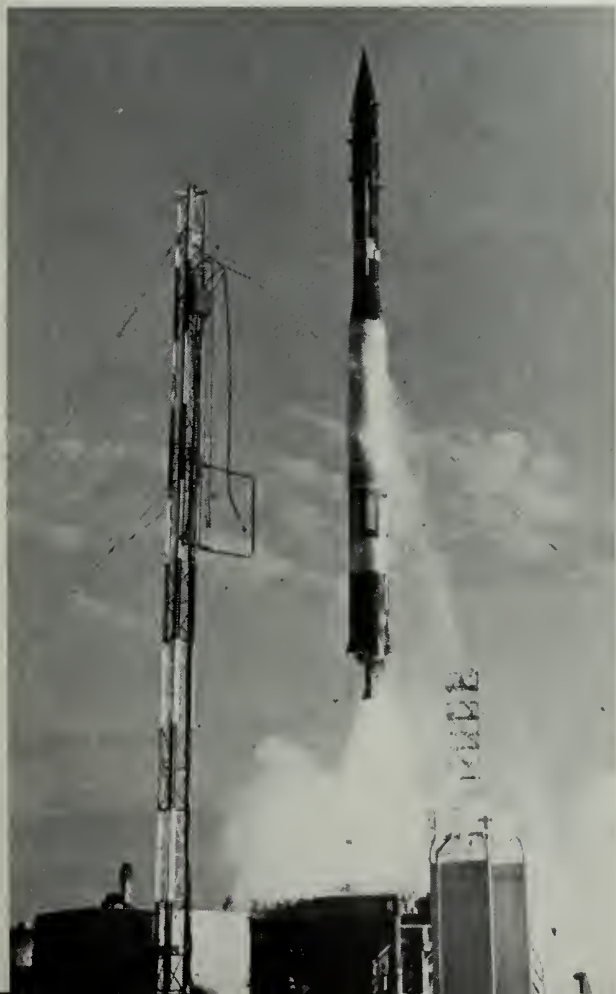
The development of military rockets has provided the technological base for space exploration. It will probably continue to do so, because of the commanding military importance of the ballistic missile. The subject lies outside our present discussion. We ask instead, putting missiles aside, what other military applications of space technology can we see ahead?

There are important, foreseeable, military uses for space vehicles. These lie, broadly speaking, in the fields of communication and reconnaissance. To this we could add meteorology, for the possible advances in meteorological science which have already been described would have military implications. The use of satellites for radio relay links has also been described, and it does not take much imagination to foresee uses of such techniques in long-range military operations.

The reconnaissance capabilities of a satellite are due, of course, to its position high above the earth and the fact that its orbit carries it in a predictable way over much of the globe. Its disadvantage is its necessarily great distance, 200 miles or more, from the surface. A highly magnifying camera or telescope is needed to picture the earth's surface in even moderate detail. To the human eye, from 200 miles away, a football stadium would be a barely distinguishable speck. A telescopic camera can do a good deal better, depending on its size and complexity. It is certainly feasible to obtain reconnaissance information with a fairly elaborate instrument, information which could be relayed back to the earth by radio.

Much has been written about space as a future theater of war, raising such suggestions as satellite bombers, military bases on the moon, and so on. For the most part, even the more sober proposals do not hold up well on close examination or appear to be achievable at an early date. Granted that they will become technologically possible, most of these schemes, nevertheless, appear to be clumsy and ineffective ways of doing a job. Take one example, the satellite as a bomb carrier. A satellite cannot simply drop a bomb. An object released from a satellite doesn't fall. So there is no special advantage in being over the target. Indeed, the only way to "drop" a bomb directly down from a satellite is to carry out aboard the satellite a rocket launching of the magnitude required for an intercontinental missile. A better scheme is to give the weapon to be launched from the satellite a small push, after which it will spiral in gradually.

THREE-TWO-ONE-FIRE and a Vanguard rocket soars from launching pad to place Navy test satellite in orbit.



But that means launching it from a moving platform halfway around the world, with every disadvantage compared to a missile base on the ground. In short, the earth would appear to be, after all, the best weapons carrier.

This is only one example; each idea has to be judged on its own merits. There may well be important military applications for space vehicles which we cannot now foresee, and developments in space technology which open up quite novel possibilities. The history of science and technology reminds us sharply of the limitations of our vision. Our road to future strength is the achievement of scientific insight and technical skill by vigorous participation in these new explorations. In this setting, our military strength will grow naturally and surely.

A Space Timetable—Thus we see that satellites and space vehicles can carry out a great variety of scientific missions, and a number of military ones as well.

The timetable below suggests the approximate order in which some of the scientific and technical objectives mentioned may be attained.

The timetable is not broken down into years, since there is yet too much uncertainty about the scale of the effort that will be made. The timetable simply lists various types of space investigations and goals under three broad headings: Early, Later, Still Later.

Scientific Objectives

Early

1. Physics
2. Geophysics
3. Meteorology
4. Minimal Moon Contact
5. Experimental Communications
6. Space Physiology

Later

1. Astronomy
2. Extensive Communications
3. Biology
4. Scientific Lunar Investigation
5. Minimal Planetary Contact
6. Human Flight in Orbit

Still Later

1. Automated Lunar Exploration
2. Automated Planetary Exploration
3. Human Lunar Exploration and Return

And Much Later Still: Human Planetary Exploration—In conclusion, we venture two observations. Research in outer space affords new opportunities in science, but it does not diminish the importance of science on earth. Many of the secrets of the universe will be fathomed in laboratories on earth, and the progress of our science and technology and the welfare of the nation require that our regular scientific programs go forward without loss of pace, in fact at an increased pace. It would not be in the national interest to exploit space science at the cost of weakening our efforts in other scientific endeavors. This need not happen if we plan our national program for space science as part of a balanced national effort in all science and technology.

Our second observation is prompted by technical considerations. For the present, the rocketry and other equipment used in space technology must usually be employed at the very limit of its capacity. This means that failures of equipment and uncertainties of schedule are to be expected. It therefore appears wise to be cautious and modest in our predictions and pronouncements about future space activities—and quietly bold in our execution.

TAFFRAIL TALK

AT TIMES, this modern, technical age becomes too much for us. While plowing through the mass of printed matter which crosses our desk each day we ran across the following:

"The main winding was of the normal lotus-O-delta type-plaied in penedermic semi-boloid slots in the stator, every seventh conductor being connected by . . ."

We shook our editorial head, wiped our glasses and stared over at the Pentagon for an undetermined period. When we awoke we looked again but the words were still there. We tried skimming and found this:

" . . . when *n* is the diathetical evolute of retrograde temperature phase disposition and *c* is Cholmondeley's annular grillage coefficient . . . in 1942 it was found that the use of anhydrous mangling ping pins enabled a kryptomastic boiling shim to be tankered."

As this gem of clarity was found in USL's *Echo* we suspected that we were having our leg pulled by experts but in this time of transmogrification of the English language, who can ever be sure? After all, it was *Echo* who gave us the hot scoop on how to figure the distance of a satellite above the earth (*ALL HANDS*, December 1957, p. 64) and then, when our readers found their figures orbiting every which way, left us to think up our own alibis. An unfriendly act.

★ ★ ★

Do you have trouble remembering names? If so, head for NTC San Diego where you can call nearly anybody Smith, Johnson, Jones or Brown and get away with it.

There are nearly 400 members of the Smith family there, including 27 Roberts (seven of these have the same middle initial, "L"); 13 are called Charles, six of whom have the middle initial "E"; and 20 with the first name of James.

The Johnson group stands 306 strong and 24 of these answer to Charles. Some 224 Joneses and 195 Browns are also included on the daily diary.

A postman in the middle of this group of kingsize family reunions not only has to ring twice, but in some cases, a dozen or more times.

★ ★ ★

We have often wondered what the other nine Navymen are doing while they wait for their turn at the current issue of this magazine, each copy of which is designed for 10 men. Now we know!

According to one BuAer department, they must be reading "ASB Notes," a technical information newsletter published monthly concerning a Bomb Director Set. Their November cover pictured nine "Henry" type comic strip characters reading "ASB Notes" while the tenth pored over a copy of *ALL HANDS*.

And that reminds us that this is the last page. You should be finished with the magazine, unless you read Japanese style, so *pass it along* to a shipmate.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war. It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us. Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air. Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS the Bureau of Naval Personnel Information Bulletin, with approval of the Bureau of the Budget on 23 June 1955, is published monthly by the Bureau of Naval Personnel for the information and interest of the naval service as a whole. Opinions expressed are not necessarily those of the Navy Department. Reference to regulations, orders and directions is for information and does not by publication herein constitute authority for action. All original material may be reprinted as desired if proper credit is given *ALL HANDS*. Original articles of general interest may be forwarded to the Editor.

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The Bureau should be kept informed of changes in the number of copies required.

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● **AT RIGHT: NUMBERS UP**—Ship's designator is spelled out by crew as *USS Wilkinson* (DL 5) enters San Diego harbor. The king-size destroyer carries the latest in ASW weapons as she cruises Pacific.



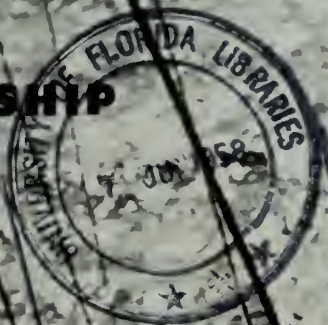
A HIT !



TEAMWORK COUNTS
on duty
or off

ALL HANDS

in this issue
STORY OF A SHIP



This magazine is intended
for 10 readers. All should
keep it as long as possible.
COPY ALONG

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JULY 1958



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

July 1958

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NUMBER 498

VICE ADMIRAL H. P. SMITH, USN
The Chief of Naval Personnel

REAR ADMIRAL J. R. LEE, USN
The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN
Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor
John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdel, News
David Rosenberg, Art
Elsa Arthur, Research

French Crawford Smith, Reserve
Don Addor, Layout

• FRONT COVER: FRAMED BELOW ship's bell, gun crew on board USS Macon (CA 132) gets practice in firing their 3-inch, 50 caliber antiaircraft guns during cruise out of Gitmo.

• AT LEFT: BIG LADY—Heavy cruiser USS Macon rides at anchor in Guantanamo Bay, Cuba. In addition to her guns the Atlantic Fleet cruiser carries the surface-to-surface guided missile *Regulus* which is launched from her fantail.

• CREDITS: All photographs published in ALL HANDS are official Department of Defense Photos unless otherwise designated.



IN DAWN'S EARLY LIGHT USS *Macon* heads out to sea. Below: D. Groleau, SN, stands in chains as ship gets under way. L. A. Weeder stands by.



IT'S DARK AND IT'S QUIET. Below, in sleeping compartments, it is hot. There is still an hour to go before reveille is held aboard USS *Macon* (CA 132). The crew is taking advantage of this respite between the exercises which are so common and so frequent during operational commitments of refresher training.

In the vicinity of the fantail, on the wooden deck, a safe distance from the No. 3 eight-inch turret, a few men stir in blankets which were brought up from below last night and make sleeping in the cool nighttime Guantanamo Bay breezes a pleasure. Their clothes are folded and neatly stacked beside them; a white hat crowns the pile. The only one in the area who really moves about is the sentry, armed with a rifle, pacing back and forth guarding the area where *Regulus I* is stored. Lights, rigged over the side, illuminate the boat boom and its boats.

CA 132 —

They are riding idly and empty.

There is nothing visible to indicate that this 17,000-ton cruiser can generate 120,000 horsepower to move it through the water at 32 knots.

As you move forward along the wooden deck past open doors that lead into a world of their own, you can hear occasional sounds coming through those doors to penetrate the stillness. Sounds like the high whine of a motor or a sonorous snore from a crew member sleeping on a bench near his work.

Macon is "at home" here. Not necessarily at Guantanamo Bay but anywhere in the Atlantic. She's been on the Atlantic side since her commissioning in 1945.

Lights are visible in the vicinity of the port and starboard gangways. OODs walk their posts and rotate megaphones in their hands while meditating on what action they would take in cases of emergency.

Up on the signal bridge where the steel deck has been freshly scrubbed by the watch and thoroughly dried, rubber mats are laid down. Other men are adding final touches to bring out the luster of highly polished brass fittings. Canvas covers are rolled up and secured, revealing sets of signal flags. Over-

ALL HANDS

head, four red lights high on the mainmast warn approaching aircraft of obstruction.

Down below, in the fireroom, boilers have been lighted off and soon they'll be cut in on the main steam line.

The time for reveille is close now. It's easy to tell even without the aid of a clock. The inevitable, a boatswain's mate sitting on one of the bitts drinking a cup of coffee, supplies you with your answer. The word is previewed by "reveille call" on the bugle. Then the word that starts men stirring in their bunks: "Reveille, reveille. Heave out and trice up, the smoking lamp is lighted in all authorized spaces." Slowly, at first, things begin to happen.

There's a shuffling on deck as men are routed from their cool sleeping spaces on deck. One by one they get up, slip into their shoes, put white hats on their heads, roll up their



THE STORY OF A SHIP

blankets, tuck them and their clothes under their arms and disappear down a hatch. A quartermaster makes his appearance on the bridge, opens the glass enclosure of the clock, holds his finger on the second hand, checks the chronometer he holds in his hand then, at the precise second, lifts his finger. The clock is correct and today the time must be right. Today the guns and *Regulus I* will fire.

The guns on this ship have never fired a shot in anger. About the

closest she's come was during one of the times she was operating as a functional arm of the Sixth Fleet during the Suez crisis. She didn't fire. But she was ready.

Reveille has gone less than 15 minutes. Other calls have come over the speaker; now it is "Away all boats." Shortly thereafter, there is the deep-throated muffled roar of small-boat engines being started; then the boom is swung in. Breakfast for the watch and special sea de-

tail has gone down.

Tompions must be removed from gun barrels. Circuits and primers are to be tested. Although no word has been passed, every eight-inch turret, each five-inch mount and all the twin three-inch guns have at least one man wearing earphones while the circuit testing is going on. One of the men in the mount leans out a door, his earphones crushing his baseball hat. He yawns, and wipes some sleep from his eye. The No. 2 turret swings

USS MACON (CA 132) heads to sea for gunnery exercises. Above: R. Paulison, BM2, starts things humming.





DAWN PATROL—L. Shepherd, SN, USN, stands fo'c'sle watch as the heavy cruiser *USS Macon* wakes up and makes ready for a day of training at sea.

out to port. The barrels move up and down in unison, and then as individuals.

A flashlight probes a path along deck leading to a seaman making up a line on the fo'c'sle. From out of the bowels of the ship, up through a hatch, a dungaree-clad sailor is momentarily silhouetted. He steps out on deck, munching on an apple, and moves toward a small cluster of men who are visible, mainly, by the red end of cigarette butts glowing in the

dark. They wait for the word to start doing their specialties.

There is a quarter moon. The stars are bright and the sky is beginning to lighten. More and more men appear on deck. The effects of the first awakening gulps of coffee erase frowns and actually turn some faces into smiles as a joke is cracked about something that happened on liberty the night before.

The deck gang moves about checking loose gear and gets ready to take

over special sea details. A boat-swain's mate calls out, "Let's get these scuttles secured." Someone moves and a scuttle drops into place; a twist of a wheel and it is secured.

Radar screens are spinning. The anemometer turns slowly, indicating it is close to calm. Uniform of the day is set—dungarees, clean white skivvie shirts and blue (baseball-type) cap. Condition Yoke has long been set.

A call comes over the speakers: "All divisions make their readiness for sea reports to the OOD." Gangway lights are unrigged and stored. The mailman, his bag over his shoulder, waits at the gangway. He'll return aboard tonight after the firing and bring back those ever-important words from home.

It's routine now. Chow is almost over. Men have just about manned all of their "getting underway" stations. The word hasn't been passed yet. But that will be soon. Special sea detail is set.

The men in the ship have already been notified in the Plan-of-the-Day that the ship is due to get underway at 0600. The whistle blows announcing the ship is underway. The sound is carried throughout the ship over the speaker system. Men hear the sound, check their watches (some even set them) and nod at one another.

The Plan-of-the-Day says, "Underway at 0600." The blast of the whistle confirms the time.

—Thomas Wholey, JOC, USN.

'AWAY ALL BOATS'—First boat leaves with softball team. **Right:** Early morning detail gets canvas spic and span.



Faces in the Fleet: Cruisermen



CHBOSN J. G. Rodgers, USN



Robert Garcia, GMC, USN



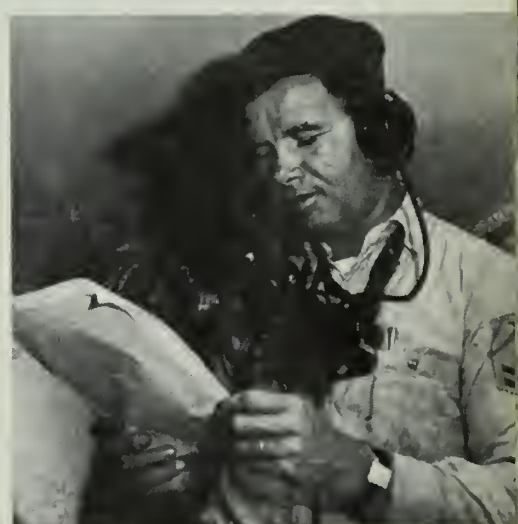
John Lipieko, BM2, USN



C. E. Bowman, BM1, USN



'Pappy' W. S. Davis, SN, USN



Lloyd Little, BM2, USN



H. M. Rasar, SN, USN



William Woods, JO3, USN



R. W. Foote, SA, USN



MACON'S SKIPPER, Capt. Harry Hull, USN, and Gun Boss watch ship's firing.

Ship's Skipper: The Man and the Job

IN THE HANDS of one man—the commanding officer—lies the destiny and well-being of every U. S. Navyman in each U. S. Navy Ship. His is the ultimate responsibility for the performance of his command which, on board *USS Macon*, is represented by some 1200 men and a 17,000-ton heavy cruiser.

This responsibility is carried by CAPT Harry Hull, USN. A soft-spoken Georgian, Captain Hull is an Academy graduate of the class of 1932. Since that time, he has served in an aircraft carrier, *USS Lexington* (CV 2), and during World War II, in submarines, including *S-22*, *Skipjack* (SS 184) and *Thresher* (SS 200). Later, he commanded a destroyer, *Orleck* (DD 886), an ammunition ship, *Firedrake* (AE 14) and an attack cargo ship, *Merrick* (AKA 97). Among his decorations are included the Navy Cross and the Bronze Star.

Before receiving his four gold stripes, Captain Hull had served as Fleet Liaison Officer at the Naval Ordnance Laboratory, White Oak, Md., and later was Fleet Operation Officer for CinCPacFLT in Pearl Harbor. He has commanded *Macon* since 29 Oct 1957.

As commanding officer, he is responsible for the:

- Supervision of the conduct of

all persons under his command.

- Morale, welfare and living conditions of the crew.
- Maintenance of the personnel and material readiness of the ship for war service.
- Security of material against compromise, theft or sabotage.
- Safety of the ship. This means specific orders regarding the handling, stowage, and use of ammunition; provisions for watertight integrity involving closing watertight doors, opening ports at sea. While the navigator is charged with all the specific duties of determining the position of the ship, the commanding officer has the ultimate responsibility in all matters of navigation.
- Details of training and education. The executive officer acts as his agent, but the final responsibility is that of the commanding officer.

In the presence of the enemy, the commanding officer is required to engage, fight to the best of his ability, and destroy the enemy.

In case of loss of his ship, he must be sure that abandon ship procedures are completed and all other personnel are off the ship before he leaves it.

All in all, a real man's job.

QUARTERMASTERS who know what lies over the horizon—boatswain's mates who keep the ship in fighting trim, ready for whatever may come—radarmen who guide fighter aircraft in strikes against enemy planes far beyond the range of the ship's guns—radiomen and signalmen who give the ship communications—these are occupants of *Macon's* topside.

From the main deck to the highest levels of the superstructures, these men practice their trades. Some know every major star in the sky, others can tie countless variations of knots, another group can quote the latest electronic theories. But all know that their job may some day be instrumental in taking *Macon* to the enemy and bringing her out a winner.

They work in *Macon's* topside with the top brass of the ship. The captain, executive officer, operations officer, navigator and the gunnery officer are all familiar to them. This is where *Macon* thinks. Courses are laid out, plans for future combat operations are made, and policy is shaped within this towering structure where the CO lives and the officer of the deck watches *Macon's* bow cut through the water.

The organization that does all of this is clearly outlined in *Navy Regs* and is repeated and expanded upon in *Macon's* organization manual. A similar command structure can be found on nearly every combat ship with slight variations depending upon the primary mission of the ship.

THE DECK GANG

ONE OF THE BEST known groups of men to walk *Macon's* topside is the "deck gang"—boatswain's mates and seamen who participate in nearly every shipboard evolution. From the day a ship is commissioned until the pennant is hauled down, the deck force is on the move. Getting underway, entering port, normal steaming watches, and ceremonies on deck are just a few of the jobs assigned to these sailors.

When *Macon's* alarms sound General Quarters, the deck force stands beside the gunner's mates in manning the guns. When the engineer

IN A NAVY MAN-OF-WAR

reports a need for fuel, it is the deck gang that rigs the hoses during underway refueling. If supplies or personnel are transferred at sea, the BMs step in to man the lines.

Macon's boatswain's mates and their charges make their home in divisions 1 thru 7 of the Gunnery Department. Each division maintains its own province.

First Division has the forecastle aft to the turret 1 area, including the turret. The 2nd Division runs from turret 2 back to the superstructure and includes the two forward boat booms.

Men of the 3rd Division are responsible for an area that extends from just forward of the after end of the superstructure to turret 3, and the mainmast. The port side up to the 03 level, and the forward stack, belong to the 4th Division along with the Number 2 motor whaleboat. The 5th Division has a like area on the starboard side, the after stack and the Number 1 motor whaleboat. The forward 01 level, the quarter booms, and the foremast are cared for by the 6th Division while the 7th has the area aft of turret 3 and the stern crane.

The divisions are also responsible for their particular gun mounts (see gunnery story, page 26), working, supply, and living spaces and for the ship's boats. Four 33-foot utility boats are operated and maintained by the 1st, 2nd, 3rd, and 7th Divisions. The 4th has the gig and the 6th has the officer's motor boat.

A BM1 is responsible for the normal cleaning of the hull down to the water line. Fourteen side cleaners are assigned to him for this purpose by various *Macon* divisions.

MAINTEINING A SHIP the size of a heavy cruiser takes a lot of elbow grease. The wood covered main deck comes in for its share of attention with the holystone the seaman's principal weapon in keeping the deck in shape. Every other week the deck gets 20 strokes, delivered in time with what is identified as an old sea chanty, but sounding suspiciously like rock and roll. After the deck gang finishes their 20 strokes, applied to every square inch of the deck, and have used scrapers to remove stains and rough areas, the gunner's mate striker who spills

oil on the deck or the seaman who lets paint drip on to the wooden surface is scheduled for trouble.

Paint is a big subject on *Macon*. She wears about 200 tons of paint inside and out, top and bottom. That's 1.5 per cent of her total displacement (13,000 tons).

Take a look at these figures. The underwater area amounts to about 60,000 square feet. The bare metal is covered by 300 gallons of pre-treatment coating followed by 600 gallons of anti-corrosive paint. On top of this is sprayed 15,000 pounds of hot plastic anti-fouling paint.

A 90-day supply of paints, varnish and thinners for *Macon* amounts to 257 gallons or approximately 2800 pounds of paint according to the BuShips allowance list. Included in this supply, stored in the 4th Division paint locker forward on the portside, is striping paint, boot topping paint, interior and exterior deck paint and other types of coverings including spar varnish and primers.

To spread this paint evenly over the bulkheads, decks and hull, *Macon* has an allowance for 83 paint brushes, 25 rollers and three spray outfits. The brushes range from tiny

artist types to flat 3½- and 4-inch brushes. Sash brushes and varnish types are also included.

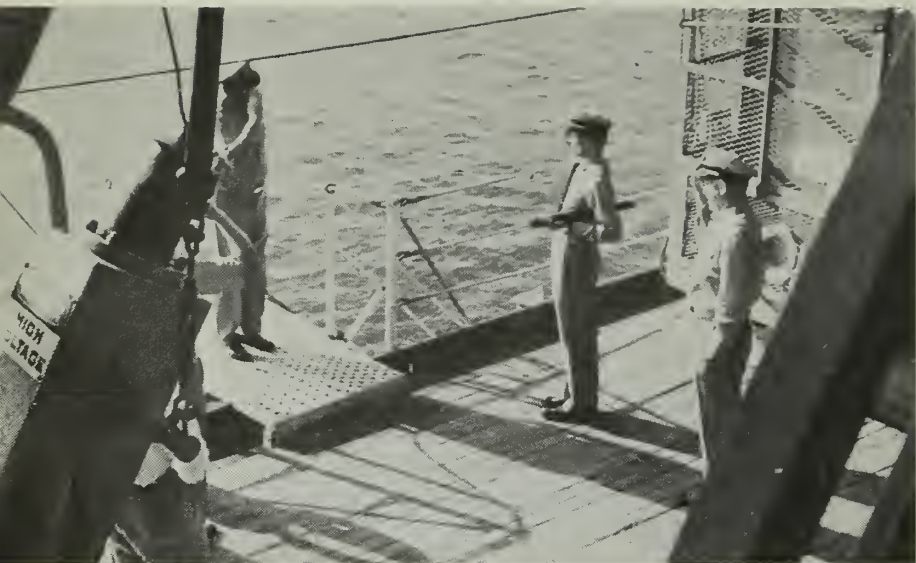
A lot of this paint is expended on the forecastle keeping the ground tackle in good shape. The 1st Division men keep this area sparkling with a combination of black and gray paint. Each visible link of the 170-fathom-long port chain glistens as it rests on deck beside the 125 fathom long starboard chain. At the end of each of these chains, made up of 54-pound links, hangs an eight-ton anchor.

THE TWO PRINCIPAL deck officers, the first lieutenant and the ship's boatswain, who work directly under the gunnery officer, can be found on the forecastle whenever the ship is entering or leaving an anchorage area. Four BMCs, a number of boatswain's mates, one first class and a group of well-trained seconds and thirds assist the two officers in getting the jobs done right.

One of the busier times for these men who wear the crossed anchors is during replenishment and refueling. First Division has the forward fueling station where they work under the direction of the first lieu-

MEN WITH A LINE—Cruisemen of *USS Macon's* deck gang handle lines while rigging their ship for highline transfer of supplies during cruise.





WELCOME ABOARD—Officer of the Deck greets commander of Fleet Training Group while *USS Macon* goes through training exercises in Atlantic waters.

tenant. The ship's boatswain directs the 3rd at the fueling station aft.

Replenishment stations go to the three turret divisions and the 7th. The first rigs the lines on the side of turret 2, the 2nd Division near frame 48 and the 3rd on turret 3. The 7th Division rigs a replenishment station near frame 128 and the 6th Division takes care of the high-lines.

To illustrate the effectiveness of the training received by these divi-

sions, Fleet Training Group observers at Guantanamo Bay, Cuba, recorded the following times during practice replenishment sessions. While 300 yards astern of the supply ship the signal flag, Romeo, was hoisted and from that point *Macon* had five minutes to make her approach and get the first manila line over. The line arrived just as the second hand ticked off five minutes.

From that moment the crew had 6 minutes to rig and get the first bag

of cargo across which they did with a saving of many seconds. Four minutes were allowed for *Macon's* crew of seaman and boatswain's mates to unrig, accomplished again with a saving of many seconds.

In the same manner the fueling rig time at the after station was cut a full minute.

N DIVISION

BRINGING A SHIP the size of *Macon* alongside a tanker or supply ship at sea takes smart maneuvering which requires that an experienced man act as steersman. This is a job usually assigned to one of N Division's quartermasters.

Walk up to the bridge area and you will see him working with charts, looking through a small black device at the sun or watching a distant beach through a small telescope mounted on a stand. (He is not watching the bathing beauties. He is taking bearings.) This man is a quartermaster.

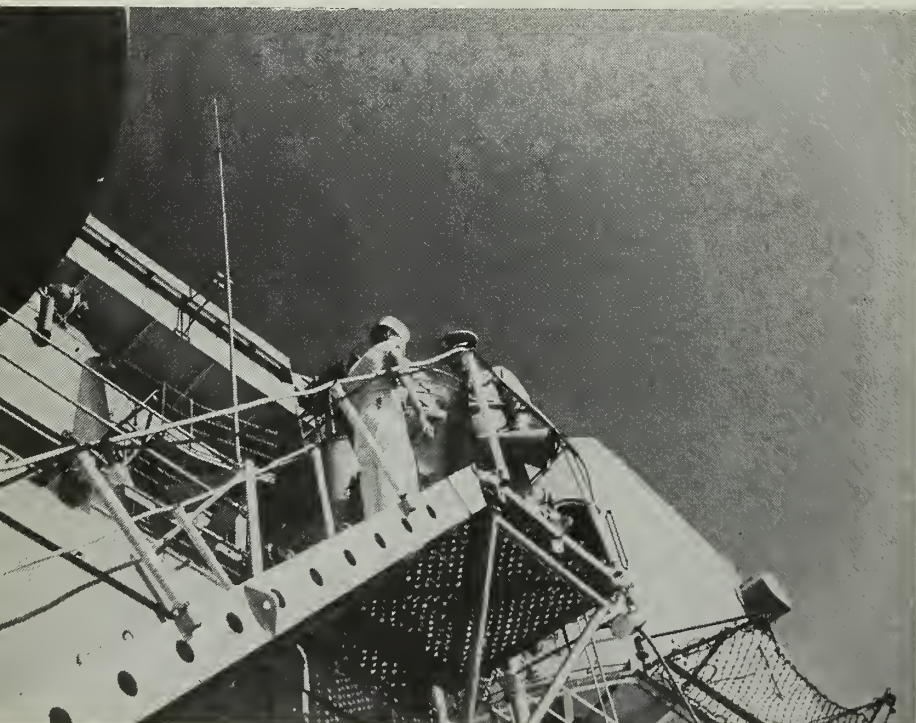
It is said that he will be one of the first to know where the ship is going and when it will get there for he acts as the navigator's assistant, steers the ship, and rings up the desired speeds on the engine telegraph. The tools of his trade are the pelorus, alidade, chronometer and sextant.

A quartermaster uses the artist's pen for correcting charts and he can read weather maps and make reports on the weather.

The Navigation Department is, of course, under the navigator and his assistant who also serves as the N Division officer. A navigator's yeoman takes care of typing the finished copies of *Macon's* log in the office on the second deck.

Assisting the navigator is a chief quartermaster. Under him comes the leading division petty officer, the division's police petty officer and the other N Division personnel.

It is the responsibility of the quartermasters to train their strikers for duty as steersmen. In times of emergency, or when entering or leaving confined waters a senior petty officer will usually be found at the wheel. At other times a scaman or a QMSN will have the wheel, but hovering nearby will be the quartermaster of the watch, ready to make corrections or to give instruction and advice. A steersman and a lee steersman are usually on *Macon's* bridge at the same time. They alternate at hourly intervals between the wheel and engine order telegraph.



LOOKING UP—Officer of the Deck carries out his duties at top of accommodation ladder as *USS Macon* rests at Gitmo during training cruise.

The N Division spaces are for the most part located in the conning tower on the 04 and 05 levels. Here they work in the chart house and on the navigator's bridge. The navigator's store room is on the second deck and the quartermaster living spaces are on the third.

As chief assistant to the conning officer and the navigator, a *Macon* quartermaster must have the answers to any question that might come up during his watch. In addition to his own duties he must know those of the OOD.

In some ways the quartermaster is a historian, recording the daily events occurring in and around the ship in his Quartermaster Notebook. The rough deck log he maintains carries a continuing record of the distances covered by the ship, engine speed and other information related to fuel, water, draft, magazine temperatures, tides and currents, and weather observations.

In addition to carrying out the normal watch routine of taking and plotting bearings and using the compass, azimuth circle and stadimeter, *Macon's* quartermasters keep up on the latest hydrographic information and keep the ship's collection of charts up to date.

THE NAVIGATOR

THE NAVIGATOR "is responsible, under the Commanding Officer, for the safe navigation and piloting of the ship, training of deck watch officers and the upkeep of all navigational equipment." So says *Macon's* Organization Manual in describing the basic functions of the navigator.

This is the officer on the bridge who must know the sea lanes and harbors. If he doesn't already know them inside and out he must study his charts and hydrographic manuals to learn about the conditions that can be expected, shoals, rocks and reefs that may exist, and also what anchorage spaces are available and if berths of sufficient size for *Macon* are available.

Macon's navigator keeps an accurate plot of the ship's position and course by astronomical, visual, electronic and other appropriate means. This information is reported to the CO three times daily and at other times if required. He also keeps the OOD and CO informed of the ship's movement. If a danger is apparent he must be in a position to recommend a safe course to be steered.

Keeping informed of the prospec-

Mission of a Navy Cruiser

TO ENGAGE IN COMBAT operating against surface ships, to destroy shore installations, and to defend against airborne threats." This is the mission of *uss Macon* and other conventional heavy cruisers as outlined by the Chief of Naval Operations.

In those 18 words the Navy has assigned every bit of *Macon's* combat capabilities a task. The cruiser plays an important role on the offensive. The 8-inch guns and the big, blue war models of the *Regulus* missile which the ship carries, will be used to strike out at the surface ships and enemy shore installations. The nine 8-inch rifles can blast targets more than 17 miles away and the *Regulus* makes jet-propelled flights of more than 500 miles.

The defense against airborne threats is a dual one on *Macon*. Not only are her guns trained on air targets that come within range, but *Macon's* Combat Information Center can be used to guide friendly interceptors to targets far beyond the range of guns and surface-to-

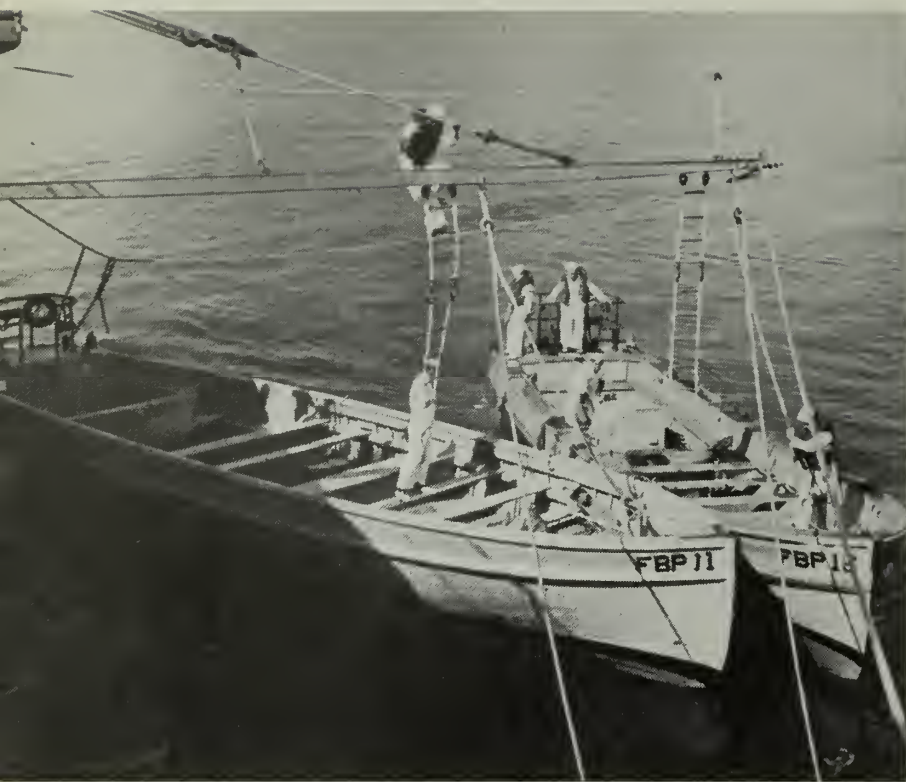
air missiles. In the past this role of air controller was traditionally assigned to an aircraft carrier but with the advent of dispersed formations, the cruiser serves to broaden the air detection and air control capabilities of a naval task force.

The cruiser was a natural choice to fill air defense gaps. With her speed she could keep up with the big carriers in all types of weather. Her equipment was capable of detecting and tracking enemy aircraft and she has the ability to control friendly interceptors. Her communication features make it possible for *Macon* to coordinate the firing of guns and surface to air missiles carried by other ships in the formation.

Macon is a medium-sized ship with a high speed, a large cruising radius, moderate protection and excellent seakeeping ability. These attributes make her the logical platform for the weapons designed to defeat the enemy on coastal shore, on the ocean surface and in the sky. Cruisers today can back up each of the 18 words outlined by CNO.



MORNING DUTIES—Special sea detail lowers jack staff as *USS Macon* gets underway for a day at sea to test-fire her guns and *Regulus* guided missiles.



SMALL BOAT COXSWAINS descend their 'private gangway' from boat boom to handle liberty boats lent *USS Macon* by Fleet Boat Pool, Guantanamo Bay.

tive movements of the ship and obtaining the necessary routing information is another of his jobs. In connection with this he must have on board the latest navigational information.

Paperwork takes up a large portion of his time. The navigator is responsible for the preparation of the Deck Log, standing orders or instructions for the OOD and the Captain's Night Orders. Daily checks assure him that the Quartermaster's Notebook is being properly kept.

THE MAINTENANCE of official records of all observations and computations made for the purpose of navigating the ship is another big job. Included is the Navigator's Work Book, Sight Log, Azimuth Record Book, Bearing Book, Loran Log, Fathometer Log, Chronometer Log, Magnetic Compass Record and Chart Records.

Maintenance of the navigation equipment is another major task for his department. Electronic navigational equipment must be adjusted and calibration data maintained and checked. The steering gear with the exception of the steering engines and motors, degaussing equipment, pitometer log and navigation lights must be in good working order.

Reference to degaussing equipment brings up another of the navigator's duties. He must make sure that the ship is properly depermed, a protection against magnetic mines. Also he must have the degaussing coils calibrated after commissioning and whenever it becomes necessary.

And the navigator must be a clock watcher because accurate navigation is dependent on precise times. Consequently the men who work under him wind the chronometers daily and make comparisons with a radio



RIG MAN—Jim Hanrahan sets placing of *Regulus* on ship's fantail.

timed signal to determine their rate and errors. They also are set to the local time zone.

A good navigator must also be a good teacher. He is responsible for training future officers of the deck who will have the safety of the ship in their hands. He also provides practical navigation instruction for juniors officers and administers officers' general training courses.

OPERATIONS DEPARTMENT

HIGH ABOVE THE navigator, spin the electronic eyes of the ship, sending out and receiving the reflected radar signals. The long cables that lead down from the antennas wind their way through many decks to a place known as Combat Information Center or simply, Combat, key unit of the Operations Department. This is the home of the radar-men, men accustomed to working in this dimly lit room, surrounded by the noise of radio receivers, loud speakers, and voices.

They can—and do—guide the ship through the thickest fog, with *Macon's* electronic eyes searching out hidden land masses and recording them on the radar scopes for human eyes to see. Not only do these electronic eyes provide navigational guidance but at great distances they can portray the advance of enemy planes as tiny white dots marching across the screen. They can also act as a source of information to guide friendly interceptors in their attacks.

The Operations Department consists of four divisions: The radio gang in OR; and the signalmen in OS Division (see pages 38 and 39): the electronics people work under the supervision of the electronics material officer in the OE Division, while the CIC, lookout and ECM personnel may be found in the OI Division.

The CIC officer runs Combat, assisted by a watch officer and a group of specialists ranging from the air controller and gunnery liaison officers to the electronic countermeasure officer. The CIC boss makes sure that the various surface and air plots are kept up to the minute, informs the radar operators of expected contacts and, in general, keeps the show on the road.

His watch officer controls the operation of the electronic search, tracking, height finding, and countermeasure gear. He supervises the control of all airborne aircraft assigned to CIC and maintains all logs and

forms required. When the ship is engaged in normal steaming operations, the OOD can call upon him for assistance in keeping the ship on station and for navigation aid in bad weather; but no matter what the circumstances, CIC still maintains a watchful eye skyward.

When the ship is engaged in actual combat an evaluator may be found on duty in Combat. He recommends a course of action to the skipper after going through the data obtained by CIC personnel. This is usually a duty assigned to the executive operations officer.

Men from the OI Division man the air and surface summary plots, and keep a visual record of the disposition of all friendly and possible enemy forces, with their courses and speeds.

The radar equipment, maintained by electronic technicians from the OE Division, is operated by radar-men under the eye of the CIC supervisor. This is usually the leading petty officer. The OI Division also provides operators for the DRT plotter and VF equipment and other CIC duty stations.

The surface and air lookouts, who come under the lookout and recognition officer—one of 14 officers who assist the Operations Officer—are also a part of the OI Division.

THE OPERATIONS OFFICER, number three man in *Macon*, is the one who coordinates the efforts of the entire crew aimed toward destroying enemy forces in time of combat. He does this under the direction of the CO, and is also responsible for the planning, scheduling and coordination of the operations of the ship and designated airborne aircraft, including logistic services.

His responsibility includes CIC, external communications and the maintenance and repair of certain electronic equipment. He is also the intelligence officer for the ship, advising the skipper as to what conditions and forces can be expected during combat operations.

Coordinating the operational requirements of the ship with the logistic services necessary is quite a job. When leaving or entering a harbor where tugs and a pilot are necessary, it is up to the operations officer to see that the services are available. He also scrounges up berthing assignments and target facilities, coordinates gasoline and stores replenishment afloat, and ship-to-ship

and ship-to-shore cargo and passenger transportation.

Another big job facing the operations officer is making sure that *Macon* gets the proper amount of training while still living up to its operational schedule.

The responsibility he holds over the external communications systems is carried out for him by the communications officer and his assistants (see page 38.) The CIC officer runs combat under the direction of the

operations officer and the maintenance of electronic gear is handled by the electronics material officer.

ONE OF THE BIG JOBS aboard *Macon* and other ships of her class is the control of the *Regulus* missile. For this, the operations officer has his CIC boss double in brass as the missile control officer. Once the big bird leaves the stern launcher, combat takes over to guide it to the target or to a point where it is turned over to another guidance system.



TEAM WORK—Ship's bridge is headquarters for head man of *Macon's* team. CIC sailors operate eyes of team and keep check on air and surface plots.





STEPPING OUT — As USS Macon heads into port her deck gang is a busy bunch. Here, they rig accommodation ladder. Rt: First lieut. directs refueling.

On the paperwork side of his job, the operations officer prepares the necessary reports; supervises the postal activities of the ship; provides for the collection, interpretation and dissemination of aerological information; supervises necessary censorship activities when censorship is placed in effect; prepares and maintains the Visit and Search, Boarding, and

Prize Crew Bills; and prepares plans for current and prospective ship's operations.

He also must be able to collect and analyze intelligence information for the commanding officer, using every means at his disposal which may include captured documents, photographs, information obtained and forwarded by friendly forces, and intercepted enemy messages.

SPECIAL SEA DETAIL

TO GET A GOOD IDEA of how Macon's topside gang handles the ship,

take a look at the Organization Manual's sections on special sea detail and underway watch organization.

When the special sea detail is stationed, the executive officer may be found at his post on the navigation bridge, the operations officer in combat, and the navigator and his assistant man the conning stations. The first lieutenant will be on the forecandle along with the ship's boatswain, who will be supervising the ground tackle.

A chief boatswain's mate and about 22 sailors will be forward, working with the ground tackle. Included in this group are the lee leadsmen (port and starboard), and a IJV talker. First Division personnel man the forecandle stations when weighing anchor.

A signalman striker from OS Division will be stationed to lower the jack when the ship gets underway, and two others will be on the colors ready to shift, while a fourth will be ready to hoist the anchor ball.

N Division supplies quartermasters for bridge assignments, including steersmen and an engine telegraph operator, one on the peloruses and a quartermaster of the watch. Three N Division seamen are occupied as talkers and a fourth is stationed on the signal bridge. A QM is stationed

KEEP IT CLEAN—Members of special sea detail wash down ground tackle.



ALL HANDS

at the fathometer in the chart house while another is on the IJV circuit in the secondary conn. Another man who wears the spoked wheel is on the IJV circuit in after steering, where he acts as steersman in emergencies.

Two IJV talkers from the 7th Division are stationed on the main deck while two other SNs from the 4th and 5th Divisions act as IJV talkers on the port and starboard quarterdecks.

Other members of the deck gang are hoisting in the accommodation ladders or bringing boats aboard as the ship prepares to get underway.

ON THE FORECASTLE everything is in readiness. The ship is riding, let us say, on 45 fathoms of anchor chain. The starboard anchor is ready to let go if necessary. Chain is taken in on the port side and later the ship is ordered to "short stay." The churning anchor wildcat draws in more chain until only 15 fathoms are left out. As the chain comes in, the grey mud is hosed off. Anchors aweigh is reported. The jack is lowered, the colors shift, and *Macon* is underway.

The first lieutenant then reports a clear anchor, indicating that it is not fouled by any underwater object.

The forecastle crew continues to hose down the anchor and the eight-ton anchor is secured by pelican hooks as it enters the hawsepipe. The starboard anchor is drawn back up into the hawse pipe from its readiness position, and is secured. The jack staff is lowered and permission requested to secure the forecastle. With permission granted, the sailors line up inboard of the anchor chains

Assistant Navigator



facing the bow where the ship's boatswain and first lieutenant are standing. A boatswain's mate pipes down the forecandle, the crew salutes and is dismissed.

A condition IV watch is normally stood while the ship is underway in peacetime. Adequate personnel for the safe and efficient operation of the ship are on duty, but no batteries are manned except as required by the training schedule. Material Condition Yoke, modified for access during daylight hours, is set and complete surface and horizon lookout coverage is available on a section watch basis. CIC is manned to cover all electronic guards and provide continuous surface and air plots.

WHEN *Macon* is on the high seas, the pilot house and open bridge will be occupied by the officer of the



Signalman

deck and the junior officers of the watch. From the deck gang comes a quartermaster of the watch, a steersman, a messenger, bugler, boatswain's mate of the watch, and a Planned Position Indicator operator and talker.

The quartermaster from N Division supervises the man on the wheel and reports to the OOD any changes in weather, temperature and barometer readings observed. He also maintains a call book, keeps track of shipping movements around the cruiser, and maintains the quartermaster's notebook and data sheet of the ship's log.

The Boatswain's Mate of the Watch is also on the bridge aiding the OOD in carrying out the ship's routine.

A man from N Division is stationed in the steering engine room. A repairman and an electrician's mate from



Operations Officer

the Engineering Department keeps him company.

On deck will be four lookouts, supplemented when steaming in fog, by two fog lookouts from the 6th and 7th Divisions.

Port and starboard life-buoy watches are supplied by the same divisions, while the 4th and 5th provide the coxswain and bowhook for the cruiser's life boat.

The Signal Bridge, Radio Central, and Radio Two (see stories on pages 38 and 39) are manned. Down in CIC, radarmen are on watch. The rest of the underway watches are stood in the engineering spaces and damage control central.

In this organization, the officer of the deck is in charge of the ship by virtue of authority delegated to him by the captain. To outline all his duties would require more space than is available but you might briefly say that he is the officer responsible to the CO for the proper operation of the ship. CIC, engineering and communications watch officers report to him, supplying him with information which will affect the maneuvering and safe navigation of the ship.

Returning to port, the procedure is reversed with the Special Sea Detail going to stations 30 minutes before entering port. The anchors are prepared for letting go, the quarterdeck watch set, and the crew goes to quarters. When the anchor is let go, the bugler sounds one long blast. The boat booms and accommodation ladders are rigged out, the colors shifted smartly.

The in port watch is set.

—William Prosser, JOC, USN.



heart are her four firerooms, in which the boilers and their operating stations are located, and her forward and after enginerooms, each containing two of her huge, geared turbines, plus an array of controls, gauges and machinery so bewildering that it takes years before a mere man can completely understand it. Out of these engines come 120,000 horsepower—enough to send the long, lean man o' war slicing through the blue sea at 32 knots or so when she really wants to strut her stuff.

Keeping *Macon's* heartbeat strong and steady is the Number One job of her Engineering Department—but it is far from being Engineering's only function. In addition, some of the men in Engineering may be called upon to work almost any-

THE MEN BELOW MAKE

DOWN IN *Macon's* vitals—at the starting point for the miles of pipes and wires that wind in endless convolutions through her long gray body—lies the mighty heart that pumps life and energy to the entire ship.

Here, the four boilers and four main engines that power the ship's movements are made to do the bidding of men who are dwarfed by the size and strength of their giant fire-eating slaves. Here, where sweat

is part of the uniform of the day regardless of climate or season, is the valve-studded, dial-eyed machinery that produces steam, electricity and compressed air for all sorts of uses all over the ship. And, here too are the distilling units which turn thousands of gallons of ocean into fresh water every day to meet the never-ending demands of the ship's boilers and her more than 1200 men.

The principal chambers of *Macon's*

where in the ship—from eyes to fantail and trucks to bilges. If a bulb burns out in a yardarm blinker light, an electrician from Engineering climbs up to replace it. If the drinking water develops an odd taste it's up to Engineering to find out what the trouble is. And, when the hydraulic system in a barber chair conks out, the barber depends on the Engineers to get it working right again.

MACON'S HEART—W. Lane, MMFN, mans No. 1 throttle board during GQ. D. Reynolds, YN3, serves as talker to bridge on board USS *Macon* (CA 132).



BECAUSE it takes a lot of people to do all the work the Engineers must do, more than 300 of *Macon's* officers and enlisted men—roughly one-fourth of her crew—are assigned to this department. And, because it takes a variety of skills to do that work there's quite an assortment of rates among the Engineers—machinist's mates, enginemen, machinery repairmen, boilermen, electrician's mates, interior communications electricians, metalsmiths, pipe fitters and damage controlmen, plus of course, the all-important firemen.

Macon depends on these men in many ways, for they:

- Operate, maintain and repair the main propulsion plant.
- Furnish the ship all her power, light, ventilation, heat, refrigeration, compressed air and water.
- Provide and maintain the ship's interior communications.
- Repair the hull and hull fittings.
- Keep the hull, machinery and

ALL HANDS

electrical system in battle-ready condition.

- Minimize the effects of damage or casualty and restore maximum seaworthiness, power and maneuverability in case of ship control casualty, hull damage, fire or flooding.

- Serve in the Rescue and Assistance Party, Repair Parties and Securing and Salvage Detail.

- Handle the stowage of fuels and lubricants not assigned to other departments.

- Operate, maintain and repair boat machinery.

THE ENGINEERS also do paperwork, such as maintaining the Engineer's Log, Engineer's Bell Book, master Current Ship's Maintenance Project, Machinery History and various operating maintenance records.

HER GO

The Engineer's Log and Engineer's Bell Book are both official, legal records which may be used in any military or civilian court as final proof of any action taken in or by the ship, and as evidence for or against any officer or enlisted man of the ship's crew who may be brought before the court or board. The Log shows such data as the average hourly speed in revolutions and knots; total engine miles steamed per day; all major speed changes; draft and displacement; and fuel, water and lubricating oil on hand, received and expended. The Bell Book is a record of all "bells," signals and orders received regarding movement of the ship's propellers. Obviously, these records can come in mighty handy in case of a collision.

The master Current Ship's Maintenance Project lists outstanding repairs and alterations, while the Machinery History is a record of tests, inspections and facts about specific pieces of machinery and the operating maintenance records include various periodic check-off lists.

Macon's Engineering Department is organized along the same standard lines found in most combatant ships—with the Engineer Officer at the top and a Main Propulsion Assistant, Electrical Officer and Damage Control Assistant to help share his responsibilities.

Below these three assistants in the chain of command (except in the case of the Electrical Officer) are

the division officers and their WO technical assistants, and below them are the division chiefs. The B (Boilers) and M (Main Engines) Division Officers report to the Main Propulsion Assistant. The A (Auxiliaries) and R (Repair) Division Officers report to the DC Assistant, and the Electrical Officer doubles as E Division Officer and as an assistant to the Engineer Officer.

KEEPING A CRUISER'S Engineering Department running smoothly is enough to give anyone headaches, but there are also other aspects to the Engineer Officer's duties. For in-

machinist's mates and firemen. About two-thirds of these men are assigned to the ship's four fireroom gangs and the rest are members of the generator gang, oil gang or machinery repair party.

Each of the fireroom gangs consists of from 12 to 15 boilermen and firemen, and is headed by a BT1 or Chief. The generator gang, headed by an MMC, is made up of 17 machinist's mates and firemen. The oil gang, with a BT1 as oil king, includes eight boilermen and firemen. And, the machinery repair party, which repairs boilers, pumps



KEEPING TABS on maze of valves, ENS S. Missailidis stands by main control peg board used to indicate the valves that are open and being used.

stance: Acting as technical assistant to the Exec in carrying out the ship's ABC defense program; keeping the skipper informed of the condition of the hull and machinery so that he knows the operational capabilities and limitations of his ship at all times; coordinating shipyard work for all departments and handling correspondence or communications about alterations or repairs to the hull and installed equipment.

Macon's Engineer Officer, CDR William T. Spellman, has been in that billet on board CA 132 for more than a year now, yet he'd still be the first to admit that he doesn't know absolutely everything there is to know about marine engineering.

Manpowerwise, *Macon's* B Division is the largest in Engineering. Besides the Division Officer and Chief, it is made up of 83 boilermen,

and associated machinery, is a two-man outfit—one BTC and one BT1. Except for the oil gang—which has its headquarters in the oil and water shack—B Division spends almost all of its working time in the firerooms.

Under normal peacetime cruising conditions, there are at least eight men stationed in each steaming fireroom when *Macon* is underway. (And, in the tropics, where the temperature in the engineering spaces seems to stick somewhere between 110 and 120 degrees, the firerooms are steaming in more than one sense.)

AS A RULE, the petty officer of the watch in a fireroom is a BT1 or Chief. Since he's responsible for the operation of all machinery and equipment, you'll find him always on the go, listening and watching for signs of trouble and seeing to it that:



TOPSIDE—Engineers are usually thought of as a below-deck outfit, but duties take them all over ship. Here, G. Perrone, EM2, climbs up to check batteries.

All the watch stations are properly manned; the right temperatures and pressures are maintained; the water level in the boiler is where it should be; and combustion requirements are being met.

Those are only some of his duties. Among the others are: Helping out at any station where he's needed; seeing that the boiler tubes are blown once a watch to keep the firesides clean; supervising the lighting off, operation and securing of boilers; keeping the chief of the engineroom watch and the engineering officer of the watch posted on operating conditions in the firerooms; and making sure all safety precautions are being observed.

And, that's not all, for in *Macon*, the PO of the watch also doubles as blowerman, operating the forced draft blowers that supply air for combustion. This means that in addition to his other tasks, he has to keep an eye on the smoke periscope and furnace peepholes to make sure, from the looks of the smoke and flames, that the fire is getting the right amount of air. (The smoke periscope is a device which enables the blowerman to see the smoke inside the up-

take as it passes before a light bulb.)

All this might make it sound as if the PO of the watch does enough to keep the fireroom going single-handed, but there is still plenty of work for the seven other men on the watch with him. One of these seven is needed to take care of the auxiliaries on the upper level of the fireroom and another has to take care of the lower-level auxiliaries. Another is stationed at the generators; an electrician mans the distribution board which shows where the power from the generators is going. The three others on watch are the checkman and two burnermen.

IT ISN'T HARD to figure out that the men on the generators and auxiliaries (pumps, air compressors and the like) make the adjustments and handle the many odds and ends of maintenance involved in the operation of their machinery. The electrician, from E Division, makes sure the proper loads are being carried on various circuits and that the generators are working right electrically.

The checkman has only one job—maintaining the proper water level in the boiler—and this demands his full attention at all times, for a little

carelessness on his part could mean a boiler casualty aboard *Uss Macon*. While the boiler is steaming his main concerns are the water gage glass, which indicates the water level of the boiler, and the feed check valve, which regulates the amount of water fed to the boiler.

Learning to read the gage glass is a tricky proposition, because it depends not only on the height of the water in the glass, but also on the size and number of the steam bubbles in it. When the firing rate of the boiler is stepped up the water level rises because there are more and larger bubbles in the water. At the same time, however, the evaporation rate is also increased, meaning the checkman must feed more water to the boiler even though the water level has risen momentarily. On the other hand, when the firing rate is decreased, there are fewer and smaller bubbles in the water, which causes the level to drop. But, since there is also a decrease in evaporation, the checkman must know that this is the time to cut down on the water.

In ships with more modern equipment than *Macon*, the checkman's job isn't quite so important, because of the installation of feed water regulators which work more or less automatically.

MACON'S BOILERS are the controlled superheat type. They each have two furnaces—one on the superheat side of the boiler and the other on the saturated side. A burnerman is needed on each side to cut burners in and out and adjust the oil pressure.

Essentially, the saturated-side furnace produces the heat which generates saturated steam ("wet" steam which cannot be heated above the temperature of the water from which it was generated) in the steam drum. Some of this steam goes from the drum into auxiliary systems. The rest goes to the superheater-side furnace where it is converted into dry, superheated steam which causes less wear on the propulsion machinery than wet steam.

The main job of the burnerman on the saturated side is to keep steam pressure at the required point, while the burnerman on the superheat side is chiefly interested in keeping the superheater outlet temperature where it belongs.

Next to the four fireroom gangs, *Macon's* generator gang is the big-

gest section of her B Division. Its job, as has already been stated in part, is to operate, maintain and repair the generators which supply the ship with electricity, the feed pumps that keep water flowing to the boilers and the air compressors for the high-, medium- and low-pressure air systems.

The high-pressure air is used for such purposes as gas ejection in the eight-inch gun turrets, starting the emergency diesel generators and supplying compressed air for the landing gear of *Macon's Regulus I* training missile. The medium-pressure air is used in places like the elevator for the missile and the gas ejection systems of the five-inch gun mounts. And, the low-pressure (ship's service) air system runs into almost every compartment of the ship for use in operating pneumatic tools, cleaning equipment, blowing out sea chests, air-testing compartments and the like.

A SHIP OF *Macon's* class uses about \$5500 worth of fuel oil to travel a thousand miles at a speed of 16 knots. The job of keeping track of all that oil is taken care of by the oil gang. Among the responsibilities of this outfit, which works out of a sort of seagoing chemical laboratory, are: Refueling operations; the storing and testing of fuel oil, boiler feed and ship's service water; and the maintenance of daily fuel oil, Diesel oil, lubricating oil and fresh water accounts. Its boss, the oil (and water) king, is responsible to the DC Assistant for maintaining *Macon* on an even keel and proper trim, since he's the man in charge of ballasting her fuel tanks as they are emptied.

Typical of what goes on in the oil lab are the alkalinity, salinity and hardness tests which the oil gang makes on water from the steaming boilers every day.

Based on the chemical reactions between acids and alkalies, these tests operate on about the same principle as the one you employed when you changed the color of litmus paper in your high school chemistry classes.

In the alkalinity test, a sample of water is drawn from the boiler and allowed to cool. The man running the test then puts some of the water in an open dish and adds two or three drops of phenolphthalein to it, which turns it pink. Next, he adds

a nitric acid solution drop-by-drop until the pink color disappears. From the amount of acid it took to neutralize the color he then calculates the degree of alkalinity of the water.

The salinity or chloride test determines the amount of dissolved salt in the boiler water. In this one a few drops of chloride indicator (diphenylcarbazonebromophenol blue, in case you like tongue-twisters) are added to a sample. This turns it blue-violet or red, depending on the degree of its alkalinity. After that, nitric acid is added a drop at a time until the sample turns pale yellow and mercuric nitrate solution is added until the water again becomes blue-violet. From the amount of mercuric nitrate it takes to do this the chloride content of the sample is then determined.

In the soap hardness test, part of a boiler water sample is poured in a bottle and a prepared soap solution is added to it. The bottle is then shaken vigorously until a heavy lather forms, and the container is laid on its side for five minutes. If the lather holds for that length of time it is said to have zero hardness. If it doesn't, more soap solution is added, and the degree of hardness is calculated from the amount of

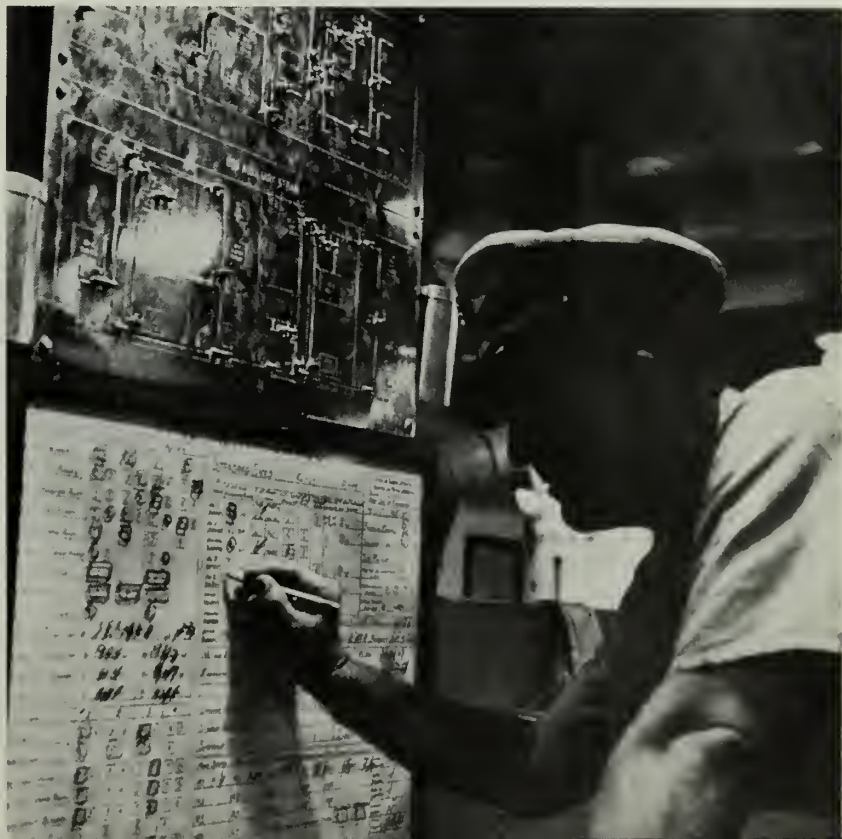
soap required to get a lather that will hold.

FROM THESE TESTS the men of the oil gang can tell whether or not boiler compound should be added to the water and, if so, how much. One of the principal ingredients of Navy boiler compound is plain old cornstarch. The other elements are sodium compounds.

If it were possible to keep the boiler water chemically neutral, this would be ideal. However, with neutral water there is always danger that it might become acid and thereby cause general corrosion. On the other hand, if the water is too alkaline, it will cause the boiler tube metal to become furrowed or grooved. So, the oil and water gang tries to keep the boiler water just alkaline enough to prevent it from becoming acid, and at the same time, to keep it from becoming too alkaline.

The sodium chemicals in Navy boiler compound maintain the alkalinity of the boiler water. In addition, they act as water softeners, preventing the formation of scale, helping to remove whatever scale may be present in the water and converting scale-forming salts into relatively harmless sludges. The cornstarch lends fluidity to the sludge so that it doesn't pack in the water drums,

FOR THE RECORD—Men in engine room keep close watch on all machinery. Here, CWO N. R. Barrett records information on engine room status board.



reduces the tendency of the water to foam or prime (liberate steam in uneven spurts), and it may also act to reduce corrosion by maintaining a protective film on the metal surfaces.

While the men in *Macon's* oil gang and the other sections of her B Division are keeping her boilers boiling and her fireroom auxiliaries producing steam, air and electricity, CA 132's M Division is also hard at work.

This division is headed by a LTJG who has a chief machinist as his technical assistant and an MMC as division chief. It includes the machinist's mates and firemen who are members of *Macon's* forward and after engineroom gangs and her evaporator gang, plus the yeomen and seamen who work in the engineering office, or log room.

USUALLY, DURING A ROUTINE, peacetime steaming watch there are at least 11 men on duty in *Macon's* forward engineroom and seven in her after engineroom. Since Main Control is located in the forward space, the officer and junior officer of the watch are stationed there. So are the two men from the evaporator gang who operate and maintain the ship's fresh-water distilling plant.

The Engineering Officer of the Watch is responsible for:

- Prompt acknowledgement and execution of all orders from the Officer of the Deck.
- Getting authorization from the

Commanding Officer or OOD before the main engines are turned on.

- All prescribed tests, inspections, methods of operation and safety instructions.

- The maintenance of the Engineering Log, Engineer's Bell Book and other prescribed operating records.

- Supervision of the Damage Control watch and related patrols.

- Immediately informing the OOD and Engineer Officer of any actual or probable casualties to the machinery, boilers or auxiliaries which might affect the operation of the ship.

The EOOW is assisted by the junior engineering officer of the watch, whose stints in the engineroom are on-the-job training aimed at qualifying him as an EOOW.

The men who operate *Macon's* fresh-water distilling hold a special spot in the crew's esteem, for thanks to the efficiency of her evaporator gang, CA 132 has not had water hours for as far back as the Engineers can remember.

The ship has a full tank capacity of 71,102 gallons of drinking water and 59,999 gallons of boiler feed water. Her three distilling units can put out a total of 48,000 gallons a day when operating at full capacity. A single day's water expenditure at the maximum allowance rate, plus the 10,000 gallons required as make-up feed for the boilers is around 49,600 gallons, so a slight increase

in consumption, even with the evaporators in continual operation, would soon empty the ship's tanks. To help keep that from happening the latest figures on water consumption are issued every morning in the Plan of the Day, so that everyone on board knows when it's time to pay a little extra attention to water conservation.

Except for the two men from the evaporator gang and the officer and junior officer of the watch, who are all stationed in the forward engineroom, the watch organizations for both enginerooms are identical—a chief of the watch, two throttlemen, a messenger, a pumpman at the lube oil pumps, a man to handle the main condensate and feed booster pumps and someone to take care of the upper level auxiliaries.

THE CHIEF OF THE WATCH sees that all machinery and equipment are operating smoothly and that all engineroom stations are properly manned. Among his many duties are: Checking all bearing temperatures; see that the men under his supervision are attending to their duties; check the Engineroom Log and Bell Book for entries and signature; determine that temperatures, pressures and vacuums on various items of equipment are maintained as required; check the lube oil gages; enforce safety regulations; see that all signals from the bridge are promptly answered and carried out; and keep the OOW informed of all engineroom operations.

In each of *Macon's* enginerooms there are two throttleboards. The main job of the men stationed at them is to give the bridge the speed it calls for via the engine order telegraph, or at times, propeller shaft revolution indicator. This the throttlemen do by opening or closing the throttle valve controlling the supply of steam to the main turbines and by taking care of the gland seal steam and various other valves. (The gland sealing system keeps steam from getting out of the turbine casing and stops air from getting into it.) The throttlemen must have plenty of skill and experience, for keeping the speed where it is supposed to be is a pretty tricky business, especially when the ship is maneuvering or in rough water.

Even the messenger's job is a technical one on an engineroom watch. Although he gets stuck with wiping up oil, calling the relief watch and other odd-jobs, he also

TRICKY JOB—Boilerman third class J. Medino watches the gauge glass indicating the boiler water level as he regulates the feed check valve.



has to know how to handle such tasks as checking bearings for oil leaks, inspecting the lube oil for foreign matter and seeing that the proper oil level is maintained in the bearing sumps.

The pumpman, working on the lower level, must be a technician too. He must: Open and close pump valves in the correct sequence; warm up the main circulating, lube oil and other pumps; check on lubrication and lube oil pressures; get standby pumps ready for GQ; make minor repairs to the lower level machinery; remove and clean lube oil strainers; repack pumps and valves; replace leaky gaskets; and of course, inform the chief of the watch of any signs of trouble.

Helping him is the man stationed at the main condensate and feed booster pumps, who: Reads dials, regulates valves and handles the maintenance on machinery which has to do with the flow of feed-water back to the boiler after it's been used in the turbine as steam.

THE MAN ASSIGNED to the upper level auxiliaries checks gages and adjusts valves on equipment ranging from the de-aerating feed tank (which uses a steam jet to figuratively "scrub" the feed water free of air) to the lube oil cooler, which lowers the temperature of the lube oil so that it helps to cool the machinery.

This is only a very brief rundown on the work of the engineroom and evaporator gangs. To go into all the intricacies of a power plant as big and complex as *Macon's* would take volumes.

Another important part of M Division still to be covered is the log room. Located near main control, this is the office where two YN3s and three seamen take care of watch bills and liberty lists for the Engineering Department, some 5000 blueprints for every part of the ship and all sorts of correspondence, publications, operating logs, records and reports. At times the correspondence load really gets heavy here, for the Engineering Department coordinates shipyard work for all departments and handles all the letters and communications dealing with alterations or repairs to the hull and installed equipment.

Typical of the records kept here are the Machinery History cards, maintained for each unit of machinery under the cognizance of the



REFLECTION—K. Nylund, MMFN, is reflected in "rear-view mirror" which enables throttleman to watch machinery without leaving throttle board.

engineer officer. These cards carry such information as the location of the machine, the file numbers for the drawings of it, the location of repair parts and data on tests, inspections, repairs, alterations and damage to it.

THE LOG ROOM, like the rest of *Macon*, gets its electricity through the courtesy of E Division, which is responsible for operating, maintaining and repairing electrical equipment and systems throughout the ship.

This is the outfit that replaces burnt out bulbs high up on the superstructure, maintains the ship's interior communications, mans the distribution boards in the firerooms, operates searchlights and stands watches on electrical equipment practically anywhere—from after steering to the anchor windlass. In short, it covers *Macon's* electrical system from stem to stern and top to bottom.

The division is headed by a LTJG, who is assisted by an ensign, a warrant electrician and the division chief, an ICC. The two sections of

the division are the electrical shop and the IC gang.

Macon's electricians certainly can't complain of a lack of variety in the work of the electrical shop, which can range from hooking up shore power to the main distribution board when the ship is in port, to fixing the electrical system in one of the ship's boats. In between, it must:

- Overhaul fans, power tools, portable lights and appliances.
- Wind coils.
- Detect shorts in lighting circuits, power distribution cables, motors and the degaussing system.
- And, prepare Machinery Histories on maintenance, minor repairs and reconditioning for motors, generators, transformers, controllers and the like.

ACCORDING TO SOME of the men of *Macon* the most important thing the IC gang does is to run the nightly movies. Of course, this isn't quite true, for these specialists operate, maintain and repair such important gear as: The sound-powered and ship's service telephones; ship-board announcing systems; the en-

gine order telegraph; call bells for the wardroom and captain's cabin; the engine revolution, course and steering telegraphs; the shaft revolution and rudder angle indicators; the gyro compass and gyro repeaters; and the underwater log. In combat, the coordination of damage control activity, the maneuvering of the ship and many other vital functions would hinge on the efficiency of *Macon's* interior communications system and the men who maintain it.

As in other ships, damage control on board *Macon* is the common responsibility of all hands. However, the Damage Control Assistant bears a larger share of that responsibility than anyone else, since it's up to him to see that CA 132's DC organization is an effective one and to supervise all repairs to hull and machinery which aren't specifically assigned to other departments.

To make everyone aware of the fact that *Macon's* ability to dish out punishment in combat would depend in large part of her ability to take it, the crew gets plenty of training in damage control. Each division has its own damage control petty officer, who attends classes held regularly by the DC Assistant, and then passes on what he has learned to the other men of his division. This training is put to the test in frequent DC drills.

During these drills six repair parties are stationed in locations that give them coverage of the entire

ship. If *Macon* were hit, the men in these parties would take care of such vital functions as shoring up sagging decks, patching holes in the hull, pumping out flooded compartments, fighting fires and making emergency repairs to the ammunition supply system, ventilating ducts, air lines, communication systems and the like. In an atomic, biological or chemical attack, these parties would also take care of decontamination.

For five of the repair parties these would be primary missions. For the sixth, which is made up mostly of machinist's mates and boilermen, the primary tasks are to repair or isolate damage to the main propulsion machinery, boilers and auxiliaries, and to provide relief crews for the machinery spaces.

THE KEYSTONE of the damage control organization is DC central, the nerve center where reports from the repair parties are collected and evaluated. In this quiet, air-conditioned room, which would be one of the hardest spots on the ship for an enemy to hit, the sites and extent of damage are plotted on various charts and peg boards to give the DC Assistant an over-all picture of the way things are going so that he knows where to send the repair parties to do the most good.

Between drills DC Central maintains security watches around the clock to report on the ship's security

condition once an hour; sound voids and cofferdams; inspect lower deck spaces for fire, fire hazards, flooding or other unusual conditions; keep an eye on the high temperature alarm board; and otherwise make sure all's well in *Macon*. The watch also takes care of keeping up the watertight closure log, the log of condition Yoke reports and the fuel oil tank status board.

The repair of battle damage is only part of the picture of the work done under *Macon's* DC Assistant, for there's also plenty to be done during normal peacetime routine to keep the ship and her equipment running smoothly and to repair the effects of everyday wear and tear.

A major share of this work is done by the A (Auxiliaries) and R (Repair) Divisions, each headed by an ensign who has a warrant officer as his technical assistant—a chief machinist in the case of A Division and a chief ship repair technician for R Division.

Besides the division chief, who is an MMC, the enlisted men of A Division include machinery repairmen, machinist's mates, enginemen and firemen. The unit is broken down into four sections—machine shop, boat and diesel gang, "steam heat" and refrigeration.

THE MACHINE SHOP, manned by two machinery repairmen and six firemen, can turn out replacement parts ranging from worm gears to nameplates with its lathes, mechanical hacksaws, drillpresses and other power tools.

The boat and diesel gang, consisting of seven enginemen and seven firemen, operates and maintains the emergency diesel generators, repairs and services the ship's motor vehicles, fuels and inspects the motors of *Macon's* little fleet of small craft and, generally speaking, takes care of just about anything aboard that has an internal combustion engine.

As one engineman put it: "If a liberty boat had motor trouble, we'd be the guys who'd get the blame; but when it's purring like a kitten everybody forgets that we inspect it and baby it every morning we're in port in order to keep it that way."

The six machinist's mates and five firemen in "steam heat" probably deal with about as wide an assortment of machinery as you could dream up on a single ship—handling routine maintenance and making repairs on everything from the presses

ALWAYS READY—Damage control is one of many jobs of Group VII. Here, S. B. Smith, EN1, R. A. Kahley, DC2, W. A. Graver, FA, check handy billy.



in the tailor shop to the after steering machinery. In between there are such varied items as the ship's heating and hot water systems; the vegetable cutters, steam tables and dough mixers in the galley; scullery machines; anchor windlasses, hydraulic valves on the firemain; and presses, extractors, cuff and collar machines, dryers and washing machines in the laundry. To make things complete, this is also the outfit that keeps the hydraulic systems of the ship's barber chairs working properly.

THE DUTIES of *Macon's* refrigeration gang may not involve the variety of equipment that steam heat's work does, but they do take in a lot of territory. As its name implies, the refrigeration gang, composed of seven machinist's mates and seven firemen, sees to it that all air conditioning and refrigeration equipment on the ship is kept in good working order. This takes in such items as the reefers in the crew's galley, chief's mess and wardroom; cold storage rooms; ice cream machines for the geedunk stand; ice-making machines and the air conditioning in sick bay, the forward and after magazines, crew's lounge, CIC, flag plot, DC Central and after steering.

Macon's R Division, with a DCC for its chief, also takes in a variety of functions. It includes the pipe, carpenter, metal and DC shops.

The number of men in the pipe shop (11 FPs and three firemen) is a pretty good indication that there's a lot of piping on CA 132—steam pipe's, hot and cold water pipes, railings, radar conduits, engine- and firemen piping and the plastic piping used for atomic washdown—to name just a few. There's also a lot of work to be done on that pipe, and involved in that work are such jobs as: High- and low-pressure pipe fitting; the layout, cutting, fitting, welding, installation and maintenance of pipes and piping systems; forming, soldering, brazing and installing copper and brass pipes and tubing; and the installation, maintenance and repair of plumbing equipment and fixtures. In addition, there's the unofficial job of thinking up descriptive terms for the characters who use plastic piping as a footrest during their fantail bull sessions.

ALTHOUGH THE missile-packing *Macon* is a long way from the wooden-ship Navy she still needs a carpenter shop. Manned by one



GEAR CARE—Engineer's duty includes keeping ship's machinery in top shape. Number one reduction gear housing of *Macon* receives wash down.

damage controlman and one fireman, this busy place handles repairs to the ship's boats and wooden decks; makes damage control shoring, plugs and wedges; builds cabinets, boxes, packing cases, platforms and staging and chutes for the off-loading of ammunition; shores up powder bags; and makes such miscellaneous items as bulletin and status boards.

Of course, *Macon* contains more metal than she does wood, so her metal shop is nearly 10 times the size of her carpenter shop. With an FPC as foreman, it includes 16 metalsmiths and three firemen. These are the men called on for such projects as relocating liferaft baskets,

changing boat skids around, putting in new scupper lips, building a new movie projection booth or straightening out damaged hatches and doors. For these men, welding, soldering, brazing, riveting and blacksmithing are all in a day's work, since they have to be able to make anything from a major hull repair to a bracket for a fire extinguisher.

All the men of A and R Divisions have an important place in the damage control picture. However, there are none of them who tackle damage control on the same full-time basis as the DC shop, operated by a DCC, four whitehat DCs and six firemen. For them, everyday routine consists of such things as testing doors and hatches, checking closure classifications, testing firefighting equipment and submersible pumps—in other words, checking and double-checking to make sure *USS Macon* will be ready whenever trouble may strike.

As one of the DCs explained: "It's like the book says. About 90 per cent of damage control is preventive—the precautions we take to cut the chances of a casualty occurring and to keep the ship going no matter what goes wrong."

In essence, you might call that the motto of *Macon's* entire Engineering Department—"to keep the ship going no matter what goes wrong."
—Jerry Wolff.



MAN WITH POWER—The engineer officer of *USS Macon* is responsible for operation of ship's 'power plant.'

GEARED FOR AN ATOMIC

THERE IS NOT a living soul in sight as the ship cuts through the water at a brisk 22 knots. No one walks the deck; no one can be seen on the bridge. Only the 5-inch mounts train as they follow an invisible air target.

This is not a ghost ship. It is the heavy cruiser *Macon* practicing maneuvers which will safeguard her in the event of a nearby nuclear explosion.

In this battle exercise *Macon* and her crew are practicing the techniques they would use to counteract the effects of an underwater burst. Of course different methods of safeguarding lives and equipment would be used if *Macon* was subjected to the air burst of a nuclear weapon,

the type of burst that authorities feel would most likely be directed against a task force on the open sea. But Navymen must be trained for every possible situation that might occur in combat. This particular exercise provided training procedures for an underwater explosion.

The hypothetical atomic bomb of an undisclosed size exploded some distance away from *Macon*, minutes ago, in the center of an imaginary task force. At that time, all hands were at their battle stations, wearing red tags simulating dosimeters — devices that indicate the amount of radiation absorbed by the wearer.

With the first warning, a sounding of the chemical attack alarm and a

passing of the word, "ATOMIC ATTACK, ATOMIC ATTACK, Underwater Burst," the sailors grabbed hold of nearby bulkheads, splinter shields, and stanchions and bent their knees slightly to absorb the shock effect of the bomb. The men on one mount were told their legs could have been broken depending on the size and distance of the bomb, because they squatted down, leaving no room for their legs to absorb the shock.

Because of its distance from the center of the explosion, *Macon* was to suffer relatively little damage.

For several minutes after the shock wave had passed, however, the crew continued to fight off enemy attackers with all the ship's guns. As the base surge neared the ship, its accompanying mist and rain-like fallout carrying radioactive materials, the crew retreated behind bulkheads into *Macon's* gas-tight envelope.

But the fight wasn't over. Even as the radioactive material was falling on the exposed decks and penetrating the Navy-gray paint, the 5-inch battery continued to fire along with ship's main battery. To an extent the men inside the turrets and enclosed mounts are protected from the radioactive fallout by flamtight compartmentation and water-tight hatches.

Bridge and fire control personnel, 3-inch gun crews, and the rest of *Macon's* crew received protection from the thick steel bulkheads and sealed hatches against the effects of radiation. The setting of Condition Zebra and shutting down of the ventilating and air conditioning systems is effective in preventing the entry of radioactive particles into the ship.

Up in forward control, the slamming of the thick hatch sealed about 12 men inside the steel shelter. The mouthpiece on the sound-powered phones used by the antiaircraft control officer failed. He pulled the headset off and used one earphone as a mouthpiece, thus keeping in touch with his mounts that were still manned.

This quick action became important a few minutes later, when theoretical enemy aircraft which had been swarming all around, began to approach the cruiser. The report came in that one was at 35,000

BIG SQUIRT—Members of *USS Macon's* decontamination team starts to hose down the cruiser to clean it of radioactivity during simulated atomic attack.



ATTACK

yards. "Out of range, hold your fire," ordered the Gunnery Officer. As the range continued to diminish, the fire control systems locked on to the approaching plane and guns came to bear.

"Range 18,000 yards, bearing 135 degrees." Mounts 51, 53, and 55 opened a concentrated fire, destroying the enemy. Of course the plane was imaginary, but the fire control people and the gunner's mates went through all the necessary motions short of actual firing.

Down on the main deck hatches opened momentarily and men wearing dark green waterproof clothing and protective masks slipped out to begin the rough decontamination of the ship. Using hoses and brushes they began working from the top, down; and forward, aft. They concentrated on the spots that monitoring crews with Geiger counters and other radiation detection devices had indicated as being hot or radioactive.

The saltwater hoses were pulled around rapidly as the teams worked to reduce the radioactivity to a level where the crews of the 3-in. 50s could return to their mounts and take up the fight. As soon as a mount was decontaminated the monitoring crews returned to check the radioactive level. If the mount were still radioactive the decontamination teams would return for more washing.

The first 3-inch mount to be remanned was 31. The gun crew returned 17 minutes after the blast with a "safestay" time of five hours. In other words the crew could stay on the mount for five hours before receiving the maximum allowable (but still safe) dose of radiation.

At plus 18, mounts 36 and 37 were passed as all clear and remanned. Two minutes later 34 was all clear and 35 was passed with a safestay time of 3 and-a-half-hours. Thirty-two and 33 were passed as all clear and then all forward air defense stations were manned.

In approximately 30 minutes all guns were back in action. The nuclear explosion had been weathered. The ship was back in action.

But the training would go on. Still to come was the indoctrination of the crew in the event of an air explosion of a nuclear weapon.

—William Prosser, JOC USN.



HOT JOB—Decontamination team stands by for practice in atomic defense of their ship. Below: Member of Fleet Training Command checks DC's work.





GRAND STAND SEAT — ENS S. L. Lieberman and W. E. Springer, SN, see *Regulus* flight from fire control director.

Count Down: Cruisermen Fire *Regulus*

WHEN *Regulus I* is fired from USS *Macon* (CA 132) the event turns out to be an all-hands job. At the present time that means 10 per cent working and about 90 per cent watching. And it will be some time before the excitement of the firing wears off.

Long before this surface-to-surface missile is ready to fire it is hoisted aboard the fantail by crane, placed on a cradle and taken below on an elevator where a small group of experts give it a thorough going-over. A scheduled firing brings it on deck.

It gets a last-minute check and is run out on rails to one side of the ship. It's raised to the firing position and remains poised until the final count-down.

The 30-foot long *Regulus I* resembles a conventional swept-wing jet fighter, flies about the speed of sound and has a range of about 500 miles. It's powered by a turbojet engine and guided by an electronic "brain." Two jet pods boost the take-off.

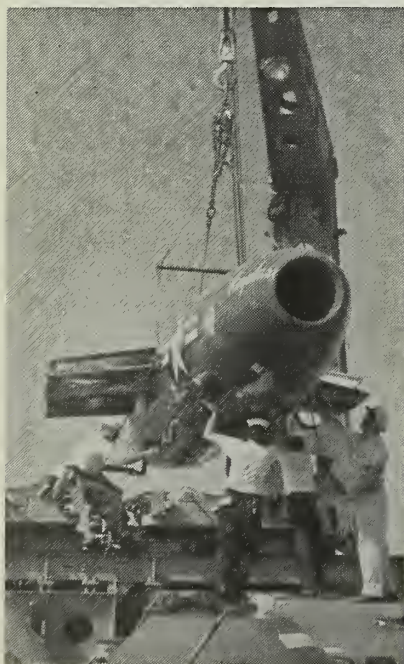
The recoverable missile is equipped with tricycle landing gear and para-

chute braking so it can land undamaged and be used again.

Two jet planes circle the area waiting until the missile is air-borne so they can guide it to a safe landing. The count-down comes over the loudspeakers, "Minus three minutes to firing time." Then it's, "Minus two minutes . . ." At the sound of, "Minus one minute . . .," those who have previously witnessed these guided missile firings stuff their fingers in their ears.

In the background you can hear the whine of the missile's engine. It

'RIG FOR REGULUS' — Fantail crane is used for missile's placement. Rt: Crew awaits *Regulus* blast off.



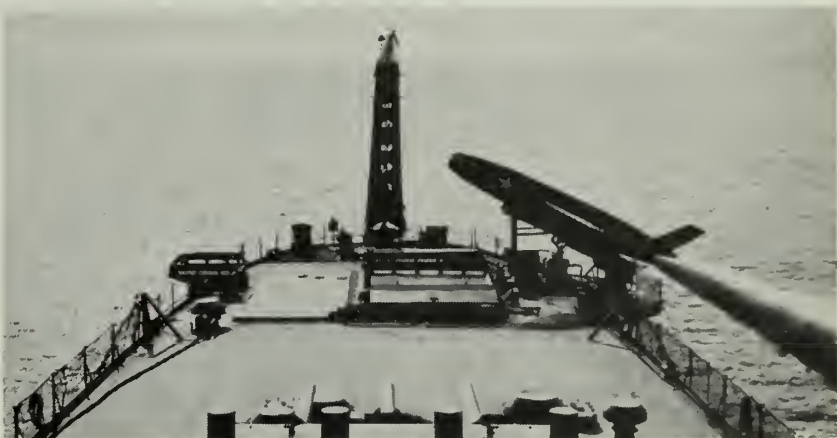
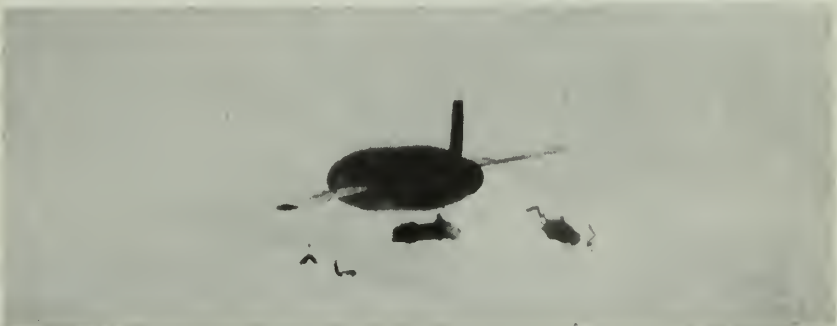


REGULUS MEN set up 'bird' for flight.

Guided Missile

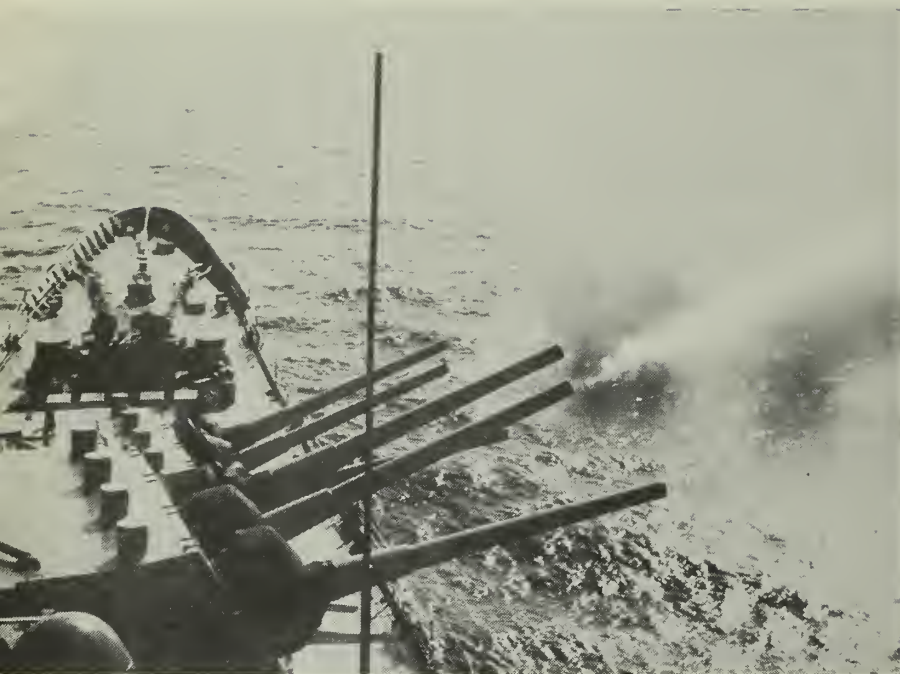
increases. Then the jet pods ignite. Seconds later, with *Macon's* CIC in control, it leaves the platform in a steady climb; the crescendo of sound builds up to a scream—then there is no sound.

The two stand-by planes swoop down over the ship and follow *Regulus*; one on either side. A short way out from the ship the two jet pods are dropped and the missile is on its way. Now the planes have it under control and will land it safely. Then it will be returned to *Macon* and the procedure repeated at another time.



MISSILE SOARS skyward from fantail dropping JATOS while cruisemen steady against the launching shock.





his helmet denoting the fact that he is the "Gun Boss," he scans the forward mounts. Others arrive, and forward gun control is fully manned before GQ sounds.

The alarms indicate the beginning of the morning-long drill. On the main deck, men move on the double and climb to their emergency posts in the superstructure. Collar buttons are fastened, dungaree pants are tucked into socks and butch haircuts are covered by steel helmets as hatches and doors clang shut. Condition Xray is set.

LCDR Neeper nods with satisfaction as he notes turret 1 beginning to swing to starboard, its three barrels moving slowly up and down as controls are checked. Inside the turret and in the ammo handling rooms below, 50 to 60 men are at controls or standing by.

Calvin Porter, GM2, a 5-inch mount captain grins down at a hot-

'PREPARE FOR SURFACE

IT is 0725. Guantanamo Bay, Cuba, lies 90 minutes of 22-knot steaming astern of *uss Macon*. In five minutes General Quarters will sound.

Today's Plan of the Day calls for a surface shoot by both the 8- and 5-inch guns, and a firing exercise by the antiaircraft battery. With this published warning *Macon's* crew move to their battle stations a little in advance of the alarm.

A few Marines clamber over mounts 32 and 33, removing the

canvas weather covers. Sailors on 35 already have their helmets and life-jackets on, and Chief Gunner's Mate Sidney L. Smith grabs a last minute smoke with some of his boys behind Turret One.

In forward gun control a lithographer from the print shop adjusts his sound-powered phones inside the oversized talker helmet. A ladder rattles as LCDR William D. Neeper, USN, *Macon's* gunnery officer, climbs up from the signal bridge. Adjusting

case man as the twin barrel mount swings out to track an imaginary target. Turret 3 assumes new life as the turret captain, Forrest C. Roberson, GM1, listens intently to his phones, watches the signals in front of him, and snaps out commands that bring the turret to starboard.

THESE are a few of the men that make up the Gunnery Department of *Macon*. Their guns are, they like to claim, the main reason for *Macon's* life. Every department on the ship functions to take these weapons within striking distance of the enemy—hence, this morning's shoot.

As phone circuits are manned and mounts declare their readiness, LCDR Neeper runs through a brief explanation of the morning's exercises to his gun control staff. He points out that the 5-inch guns will fire first to starboard at a towed target, range 9000 yards. Next will come the 8-inchers at a range of 17,000 yards.

The distant tug and its target tow move into position, but an oiler and a DD steam serenely along just beyond the target and in direct line with the trained-out guns. Up in a Mark 37 director the control officer heatedly proposes that a shot be fired across the tanker's bow and it be told to heave to.

This suggestion is modified on the

GUN BOSS—LCDR W. D. Neeper notes ranges and bearings during firing.



ALL HANDS

bridge via radio by Captain Harry Hull, USN, known affectionately to the crew as "Hurry up Harry" because of his desire to get to sea, get the job done, and get back. The captain's "suggestion" that the oiler get out of the way has the desired effect and soon the AO and its trailing destroyer turn tail and head for safer areas.

With the target clear, ranges and bearings filter down through the fire control system. Guns are trained, ammunition is sent up through the hoists as the command: "Prepare for surface action, starboard," is passed. "Standby" is the next command and then "Commence firing." Down in surface plot, the fire control officer watches instruments as the starboard 5-inch battery comes to bear and voices a sharp "shoot." Triggers are keyed and 5-inch barrels leap.

Even though the commands were heard, gun control personnel jump as



ACTION'

the first salvos go out and then they settle down to watch for splashes. Before the first round hits the water, crews are loading the second into the still hot barrels. Continuing corrections are made by the fire control systems, the second and third rounds boom out, and are on their way to the target five miles away.

INSIDE THE MOUNTS it is strictly business as the guns are loaded, fired and reloaded. A misfire occurs, but a Mount Captain promptly switches the fire to the mount's other barrel. Only 66 seconds are allowed for each gun to get 12 rounds off at the series-40 surface target sled which carries two radar reflectors.

Watching the splashes through binoculars, LCDR Neeper explains that only one mount forward and one aft is firing, each using only one barrel. This is sufficient since all of the guns are directed by either the forward or after mark 37 fire control systems. "Pretty good shooting," the Gun Boss comments as splashes bracket the target, "considering that we just left the Navy Yard."

"Cease fire" orders are given to the Air Defense officer who grants permission for a mount to unload its misfire through the muzzle at the target and asks for a report on the malfunction.

He is assisted in administering

this surface shoot by his main battery officer, Air Defense officer, sectors 1 and 2 officers and a battery of talkers. After gun control is occupied by the sector 3 and 4 officers and more talkers.

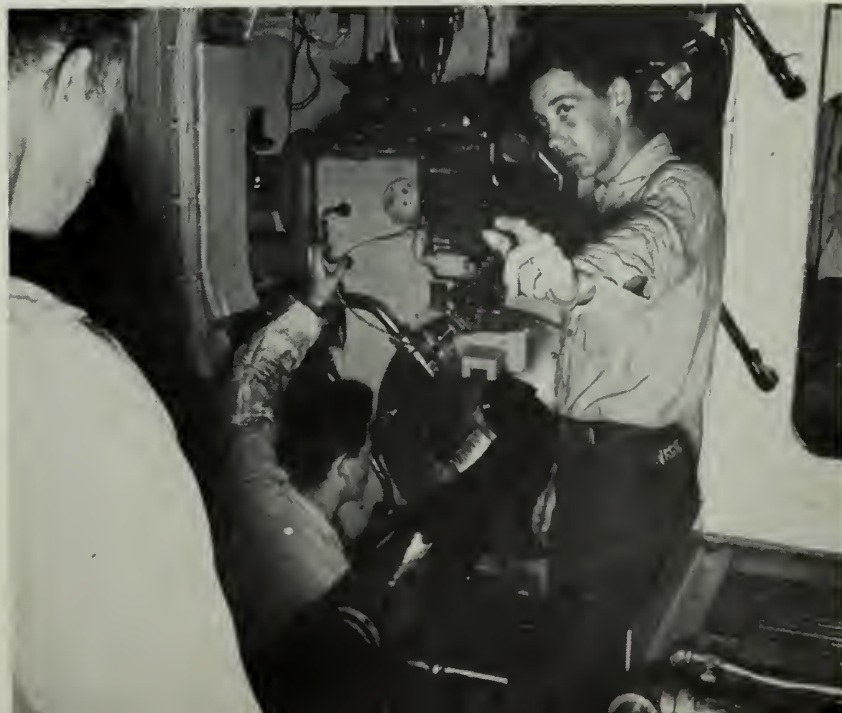
Down in Mount 53 (the number denotes that this particular mount is the third 5-inch installation counting back from the bow, odd figures to starboard, even to port) GM2 Porter and his crew are busy securing from the surface fire and preparing for a series of tracking exercises. From his perch Porter calls down instructions to his 11-man crew.

Each weapon has a projectileman

who removes the shells from the hoist and a powderman who pulls the cases of powder up through a scuttle in the deck of the mount. A hot-case man throws the used brass out of the mount when it is elevated to an angle where the hot case chute will not function. The gun captain controls the spade which rams the projectile and powder case into the chamber. In the front of Porter's mount, sitting between the guns, is the sight setter. The trainer sits in the righthand corner and the pointer in the left.

Below the mount in the upper handling room are six more men.

TRAYMAN signals rammerman to load projectile, gun captain inserts primer.





ON THE DOUBLE—Sounding of general quarters sends USS Macon's crew running to their battle stations. This was the start of the day's gun practice.

Two powdermen keep Porter's guns supplied with powder and two projectile men keep the hoists loaded with shells. The fifth and sixth men operate the scuttles through which ammunition is passed from the magazines.

The purpose of Macon's visit to Guantanamo Bay is, of course, to provide the best training available in all phases of operations. It's hard work. This morning's shoot is only one of such exercises and training is an all-hands operation, from the captain on down to the seaman apprentice who has had a few day's more experience than his shipmate.

CHECK OUT—Chief Gunner's Mate S. L. Smith supervises the checking of firelocks inside one of ship's turrets.



The heart of the training program for the entire Navy lies primarily in the capabilities and initiative of the senior petty officers—men such as Porter. They, and their division officers, are those who either formally or informally and, by example or by a casual word here and there, pass on the accumulated knowledge of the Navy. During drills such as this they pass on the practical as well as theoretical knowledge needed to operate the Navy. Throughout the ship, on this and every other occasion, division officers and petty officers are passing the word in similar fashion. Porter, for example, continues to teach his gun crew, even during the stress of this morning's exercise.

AS MACON TURNS to port to extend the range for the 8-inch shoot, Porter mentions that the 5-inch guns are the most typical of our present-day weapons. (More than half of the Navy's catalog of gun mounts and turrets is devoted to 5-inch weapons of various types and calibers.)

"Jake," says Porter, "How many 5-inch guns on board a heavy cruiser like Macon?"

"Six 5-inch 38 caliber enclosed twin mounts," replies Jake promptly.

"But tell me, Porter, what does that 38 caliber mean? I never did get that straight."

"Andy, tell the man what it means."

"The caliber of a gun is the diameter of the bore. In the Navy designation 5-inch 38 caliber, we give

the bore size as five inches and indicate the barrel length by saying it is 38 calibers long. Let's see, it would be 38 times five inches 190 inches long."

"That's a good explanation. Now take a look at these two guns," Porter ordered. "It is like looking at one gun and seeing its reflection in a mirror. The rammer is on the right side of the right gun and on the left side of the left gun. They also have right and left housings, slides and gas ejectors.

"Like all of the ship's 5-inch mounts, this one can be aimed automatically with the orders coming in the form of electronic impulses from the fire control system; through the use of local power; or by old fashioned muscle turning the cranks that rotate the mount and elevate the barrels.

"We can fire 12-rounds a minute through each barrel if you are all on the ball and can drop the shells on a target more than 18,000 yards away or cause air bursts around an enemy plane more than 30,000 feet overhead."

This gunner's mate who has been on mount 53 for two-and-a-half years and in Macon for eight years, asked his sight setter: "What type of primers do we use?"

"Percussion and electrical," is the snappy answer.

"OK. What type of ammunition do we use," is the question put to a trainer by Porter.

"This mount uses semi-fixed type ammunition," the trainer answers and expanding on his answer he continues, "the projectile and the powder case are separate units. We can fire VT proximity fragmentation shells against aircraft or the common AA shells that explode on contact."

"That's right," Porter says stopping the sailor, "and we can also fire smokesHELLS, armor-piercing and other Navy projectiles."

PORTER HAS EVERY right to instruct his men with authority. He has spent 14 years in the Navy and nearly all of his gunnery experience has been on 5- and 3-inch mounts; but some of his running mates claim he is strictly a right-handed gunner. During his eight years in Macon he has always been assigned to a mount on the starboard side.

"This starboard mount, which is no different from those on the port side," he commented, "is mounted above an upper handling room where

the ready service ammunition is stored. The ammo is passed up through two projectile hoists, and two powder case hoists to the gun mount. The upper handling room is supplied by two hoists bringing shells and powder up from the lower handling room, which is several decks below.

"Send up a dummy round," Porter orders and with a loud buzz the projectile arrives at the top of the hoist resting nose down in a projectile flight that might be likened to an old oaken bucket.

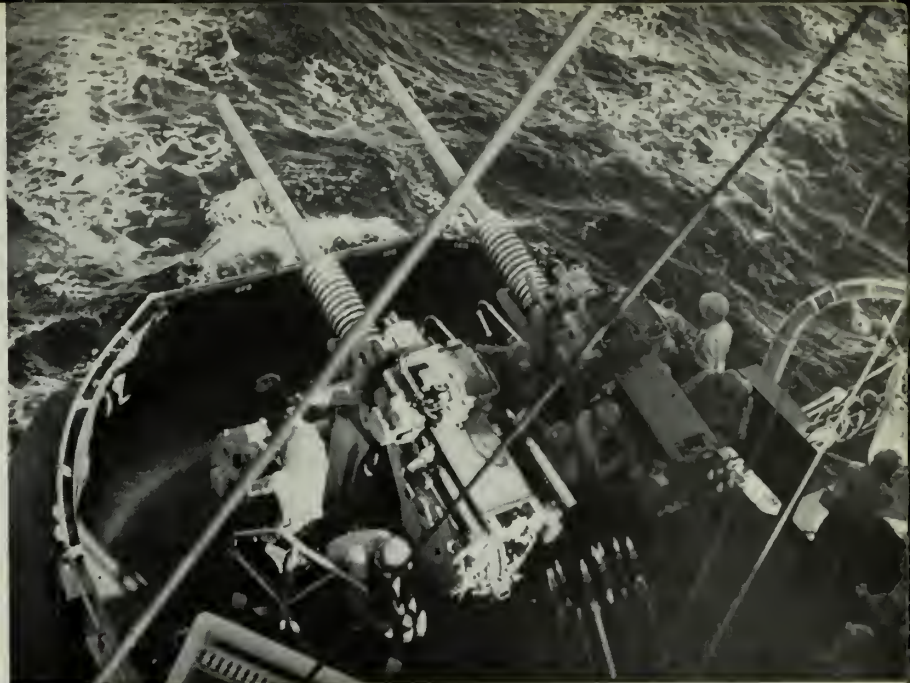
"See these pawls inside the projectile flight? During the trip up from the handling room, they engage these lugs on the timing ring of the fuze and turn it the proper amount so that the shell will explode so many seconds after firing. We can regulate this fuze-setting device here in the mount or it can be set through the fire control system.

"Now take a look at the projectile hoist. Inside are two of these projectile flights, both attached to a continuous link chain which is propelled by sprockets. The two flights are mounted 180 degrees apart on the chain. When one flight is at the top of the hoist the other flight is down. Both of the projectile platforms move in their own channel. When the flight reaches the top the chain direction is reversed and it returns to the bottom for another shell. At the same time the other flight containing a shell is raised to the top."

With the passing of the order: "Standby, surface action, starboard," Porter sends his crew back to their posts. The range between *Macon* and the target streaming 1500 yards behind the tug, has widened to 17,000 yards. LCDR Neep, making a last-minute check with his main battery officer, is informed that each of the three 8-inch turrets are ready to fire seven rounds in two minutes, 20 seconds, through a single barrel at the target.

Spot 1 and 2, the two Mark 34 fire control system directors, are already locked on target and tracking. Standby is passed over the phone circuits followed a few minutes later by "Commence firing." The long barrels leap into the proper angle of elevation selected by the fire control systems and the first salvo is on the way.

With the round off, the ready switch inside the turret gun compartment is thrown to safe by the gun captain, and the barrel auto-



FIRE AWAY—Gun crew of 3-inch 50 caliber antiaircraft mount gets a bang out of firing at the tow target during gun exercises at sea off Gitmo Bay.

matically drops back to the load position, nine degrees' elevation.

"Bore clear," calls out the gun captain after he has opened the breech, turned off the gas ejector and looked up the barrel. The trayman extends the rammer tray and the rammerman moves the lever that in 1.5 seconds pushes the 260-pound projectile into the gun and firmly seats it as the gun captain inserts a primer cartridge into the firing lock. As the rammer is withdrawn, the gun captain and trayman become powdermen, each lifting a 105-pound silk bag of powder from the hoist in the deck, placing it in the ramming tray, and ramming it by hand.

The rammer cradle is retracted, the gun captain steps on the foot pedal to close the breech by power, and then moves the ready switch to close the firing circuit. The barrel leaps to gun-order elevation and "Ready" is signaled to turret captain Roberson, GM1.

WITH THE ORDER of "Cease fire" after Turret 3 got off its seventh round, Roberson pointed to the right gun. "The entire loading operation in there is accomplished by gun captain W. H. Rose, GM3, in 8.5 seconds. He is one of the best 8-inch gun captains in the ship," Roberson explained to a junior officer who recently reported aboard *Macon*.

"Why is this turret divided into compartments while the 5-inch mounts are not?" the officer asked.

"The 5-inch mount uses a metal powder case while we work with

gunpowder in fragile silk bags. There is always the chance of a fire which could be disastrous," Roberson answered. "In order to localize this danger into several small areas rather than one big area, three flame-tight bulkheads have been installed in the turret dividing it into four compartments."

"I see what you mean, Roberson. If a fire does occur in this gun compartment you could keep on firing the other two guns if necessary."

"That's right sir. See how these two bulkheads run from the front of the turret to a point about three-fourths of the way to the rear? They divide the forward portion of the

SCOPE OF FIRING—Turret officer L. A. Lentz looks through periscope to check target's location and guns.



turret into three spaces. The third bulkhead runs across the turret providing a booth for the turret officer.

"I'm stationed in here with the turret officer during GQ. We have the rangefinder, the computer and other fire control instruments used when the turret is in local control; and the turret officer's transfer switchboard where he controls firing and various types of local and remote circuits.

"The other three flame-tight compartments each contain the breech end of one of the guns, and ammunition hoist equipment. In addition to the gun captain, rammerman and trayman, each gun compartment holds a local control pointer, while the left gun compartment has a trainer who maneuvers the entire turret while on local control, and a sight setter. These crew members enter the gun compartments through individual doors in the rear bulkhead."

"All right, you have the turret protected, but what about below decks?"

"This flame-tight compartmentation continues all the way down through the turret which extends below the first platform deck. Down there is the powder room where bags

of powder are passed from the magazine through scuttles that automatically close on the magazine side when opened in the powder handling room. A two-stage hoist is used to carry the bags to the three gun compartments, another design feature which insures flame-tight integrity.

"The lower hoist consists of three car-type units that carry the silk bags of powder to the upper handling room. Each of these hoist units services a pair of hoists that carry the bags to the gun captain on the left side of the gun, and to the trayman on the right. Each hoist is fitted with flame-tight upper and lower doors so that there can never be a clear path for flames to follow to the lower levels of the turret.

"The heavy projectiles come up through three hoists, one to each gun, from the platform just below the upper handling room. You can see how the shell is resting in the end of the ramming tray when it arrives in the gun compartment, ready to be swung into a horizontal position for ramming.

"We are designed for surface action or shore bombardment at ranges up to 31,000 yards," Roberston commented, "so we will not be

taking part in the AA shoot this morning."

A LREADY A PLANE is flying low overhead, its bright red target sleeve easy to see as it streams out behind the plane. LTJG George H. Overstreet, usn, Macon's AA control officer, between giving commands and receiving orders, lets his staff know that the first firing runs would be bearing rate maneuvers. In other words, the ship's ability to strike a target at a nearly constant range (5000 yards), but rapidly changing bearing, would be tested by the plane flying back and forth parallel to the ship's course. Both the open 3-inch 50 caliber mounts and the 5-inch battery would be firing under control of their respective fire control systems.

Many think that the sharp crackling sound of the 3-inch mount, firing 50 times a minute through each barrel, is enough to wake the dead, but in times of combat it can mean certain death to approaching planes. The 3-inch rapid-fire mounts use only the VT or proximity fuze. In contrast with the large black 5-inch explosions, the 3-inch bursts are more numerous, smaller and white in color.

Taking advantage of a lull in the firing, LTJG Overstreet told a striker from X Division, "The fixed ammunition for those 3-inch mounts is kept in ready service lockers near the twin barrel mounts. Shell passers load the 24-pound rounds on revolving magazines at the rear of the mount as the left and right shellmen on each gun withdraw shells to feed the automatic loaders."

"Those mounts don't have hoists like the big guns, do they?"

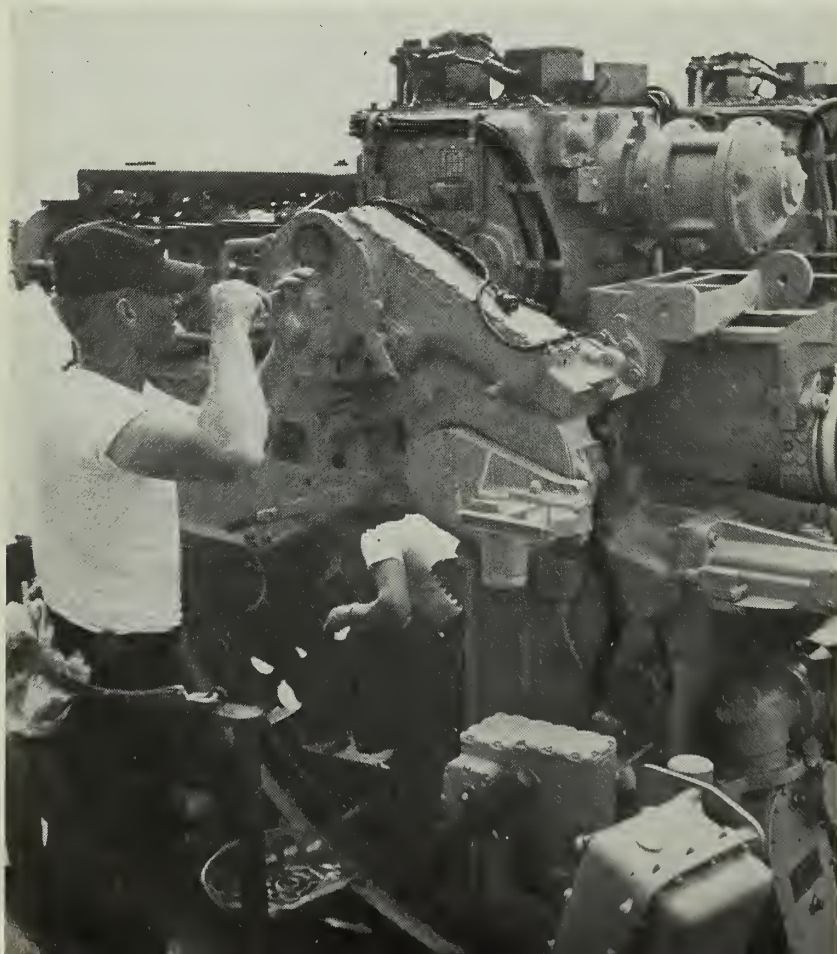
"That's right, this system of ammunition handling eliminates the need for elaborate projectile hoists."

"Air action, starboard! Standby! Commence firing!"

When the thunder of the gun subsided and cease fire was ordered Mr. Overstreet said, "The 3-inch mounts can train through nearly 720 degrees (two complete turns) before hitting the stops and having to unwind. They are manned by seven men including four loaders, two gun layers, and a gun captain. They also have several ammunition passers."

Looking down on one of the mounts the striker asked, "Who is the guy that sits between the barrels, sir?"

"That's the gun captain who con-



PRELUDE TO PRACTICE—Gunner's Mate First Class John George checks over his gun while others of his crew get things shipshape for the day's shooting.

P & A in a Cruiser

IN ANY MAN O' WAR, the skipper's right-hand man is the "exec"—the captain's chief assistant and the man who would take over if the captain were disabled. In *USS Macon* the man in that many-sided billet is CDR W. J. Hughes, Jr., USN.

Detailed as *Macon's* executive officer by the Secretary of the Navy, CDR Hughes ranks next to the captain in the ship's chain of command. He is the direct representative of the CO in maintaining the military and general efficiency of *Macon*. The XO has no authority independent of the skipper, and the details of his duties are regarded as execution of the captain's orders. However, in all matters pertaining to the operation and maintenance of the ship and to the preservation of order and discipline on board, all heads of departments and other officers and enlisted men are under his orders.

The responsibilities of the exec are many. They include: The coordination and supervision of all departments; morale, welfare and discipline; the assignment and records of personnel; religious matters; the preparation and maintenance of bills and orders; supervision and coordination of work, exercises and training; supervision of loading and berthing plans; supervision of ship's correspondence; the training and education of the ship's company; and even legal matters.

When *Macon* is cleared for action—whether it's for real or only a drill—the executive officer is the man who makes sure the ship and its departments are ready for battle and informs the skipper of that fact. Because he is considered the relief captain, the exec's battle station is in a spot where he could survive a hit which might disable the CO, and where he would be in a position to assume command promptly and effectively if the need arose. From that spot he must keep in close touch with the primary ship control station while the fighting is in progress. Afterward, he reports to the captain all details of the action observed and makes a statement telling how various individuals conducted themselves during the engagement.

TO SHOULDER this load of responsibility the exec has help from the officers and enlisted men of the Executive Staff and, of course, from the

heads of departments in the ship.

The officers on the staff include a LTJG who doubles as Personnel officer and X Division officer, the assistant personnel officer (an ensign), the W-1 who is ship's secretary and CO's writer, the LTJG who serves as education and training offi-

Personnel & Administration

By the Executive Staff

Make for a Well Run Ship

cer, the lieutenant who is *Macon's* chaplain and the legal officer (a LTJG). In addition, officers from other departments of the ship may serve as special staff assistants, and the chief master at arms acts as an assistant to the exec in matters involving the enforcement of regulations, the maintenance of good order and discipline and the welfare of brig prisoners (if there are any).

Basically, the personnel officer, assistant personnel officer and the men who work in the personnel office, are responsible for assigning enlisted men to the proper divisions and for the administration and custody of enlisted personnel records.

This is the office that keeps service records up to date; takes care of the paperwork that goes along with transfers, advancements, reenlistments and the like; compiles

estimates of future personnel requirements; issues those all-important leave papers and liberty cards; establishes division quotas for the assignment of messmen; prepares the daily absentee report; processes the orders of men arriving on or being transferred from *Macon*; and handles the many other tasks involved in personnel administration for more than a thousand men.

Besides directing these activities the personnel officer also supervises such matters as the administration and operation of the exec's office, and the preparation and review of the Plan of the Day before the exec signs it. While "wearing his other hat" as division officer of X Division the personnel officer performs most of the usual duties of a division officer.

THE SHIP'S SECRETARY is the man who handles and accounts for *Macon's* correspondence, takes care of officer personnel records, acts as the CO's secretary and supervises the preparation of correspondence originated by the captain.

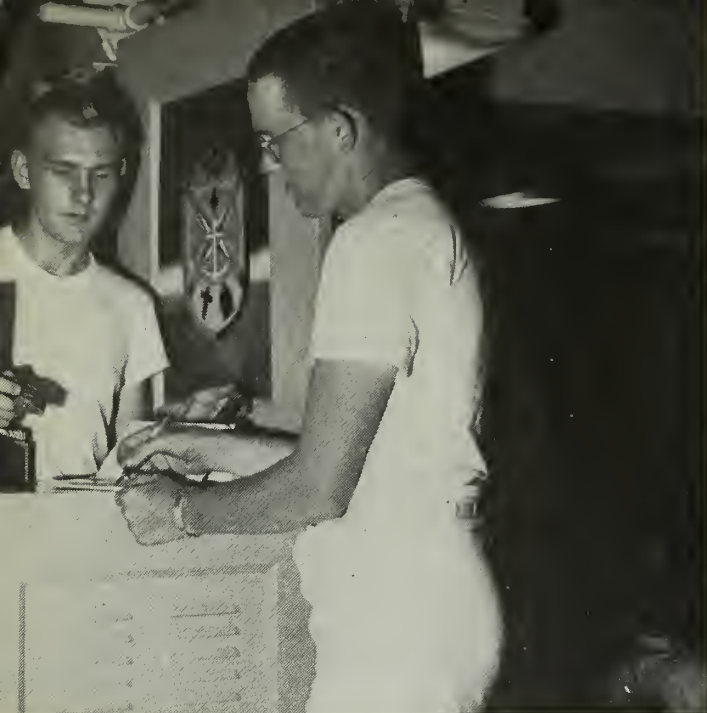
In carrying out those functions he supervises the men who work in the Captain's Office and the administration and operation of that office; reviews all correspondence prepared for the signature of the skipper, exec or other officers authorized to sign by direction; processes all incoming and outgoing correspondence except Top Secret; maintains the central correspondence and directives files of the ship; supervises the compilation and forwarding of required reports; keeps reports and correspondence moving; advises the heads of departments and clerical personnel on problems involving the Navy correspondence system; supervises the distribution, handling and forwarding of officers' fitness reports; keeps officer records up to date; directs the operation of the print shop; and manages many other phases of the paperwork involved in running an organization the size of *Macon*.

The Education and Training officer (see page 46) functions as a staff assistant to the exec in the administration of the ship's training and education program. With the Planning Board, he plans and coordinates all shipboard training.

Macon's chaplain and his enlisted



MACON'S executive officer CDR W. J. Hughes, Jr., talks over problem with ship's medical officer LT C. B. Sledge.



EXECUTIVE STAFF has many responsibilities. Mail for cruisemen is sorted and (left) ship's library is put to use.

assistants are, of course, the men who minister to the religious and spiritual needs of the men of *Macon* (see page 41).

He also supervises the administration of the Crew's Library, which, thanks in part to its air conditioning and recent remodeling, is an especially popular hangout on board.

THE LEGAL OFFICER and his enlisted assistants could be considered the justice department of CA 132. For instance, here are some of the phases of the legal officer's duties: Advises the CO and exec on the interpretation and application of the Uniform Code of Military Justice, the Manual for Courts-Martial and other sources

of military law; makes sure personnel assigned to legal duties are well-versed in those duties; works with division officers and the education and training officer to see that the men of *Macon* know their rights and obligations under the Uniform Code of Military Justice; and supervises the technical and clerical preparation of legal matters.

The Chief Master-at-Arms and his men are familiar figures to even the newest arrivals on board *Macon*, for they function not only as a police force, but also as guides and "official greeters," and take care of such odds and ends as the Lucky Bag and the supervision of rigging and unrigging for church, movies and other special functions.

In their line of duty they see to the many "little things" that keep a big organization running smoothly and effectively. For example, they: Enforce Navy Regs, Ship's regulations and other directives; see that the crew turns out for reveille, GQ and the like; keep silence after Taps; help process new drafts of men by seeing that their records are picked up and delivered to the personnel office, and that each new man is assigned a bunk and locker; keep mess, pay and store lines running smoothly; make sure the ship and its gear are kept clean and in order; furnish escorts for the CO, exec and high-ranking visitors during inspections and other functions; and see that regulations and instructions regarding visitors are adhered to.

—Jerry Wolff.

ALL HANDS

PERSONNEL OFFICE of exec is responsible for assignment of enlisted men to proper division of ship and takes care of enlisted personnel records.



TO YOUR GOOD HEALTH

WHAT TO DO 'til the doctor comes" isn't much of a problem in USS *Macon*, for no matter where the ship goes, she carries first-rate medical and dental facilities right along with her.

Among these facilities are: An operating room, a two-chair dentist's office, a 14-bed sick ward, a four-bed isolation ward, a diet kitchen, a combination pharmacy and bacteriological laboratory, a treatment room in which sick call is held, a doctor's office and an X-ray darkroom with a complete processing outfit. Because air conditioning is almost a necessity for keeping patients comfortable in the tropics, these spaces are air-conditioned. However, aside from that note of "luxury," they are almost as compact and utilitarian in their way as is the inside of a gun turret in its way.

Macon's medical department is headed by C. B. Sledge, LT (MC), USNR, who is medical and H Division officer. Its staff includes one HMC, two HM1s, four HM2s, three HM3s, one HN and four HAs. Just about all of them have seen service with the Fleet Marine Force, and one—F. G. Baggio, HM1—has the Silver Star and Purple Heart medals to show for it.

Naturally, the first concern of the Medical Department is care for the sick and injured, but that is not its only function. For instance, in carrying out some of its other responsibilities, the department: Takes whatever measures are necessary for the prevention and control of disease; inspects the ship's living and working spaces to find and eliminate conditions which might endanger the health of the crew; examines messmen, food handlers and food-handling spaces at regular intervals; conducts training programs in health, hygiene and first aid; assists local health authorities in their inspections; and advises the skipper of quarantine regulations which affect the ship.

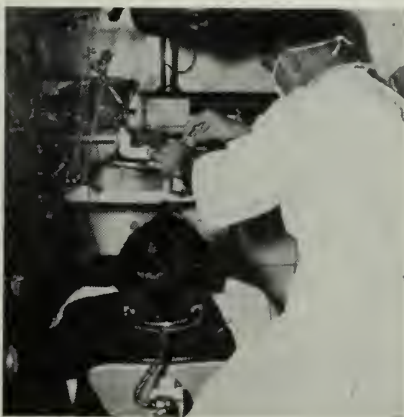
To show how thorough the doctor and corpsmen are in their efforts to safeguard the health of *Macon's* men, here are just a few of the items they regularly inspect—heads and showers, the barber shop, the soda fountain, laundries, drinking fountains, galleys, the butcher shop, the bake shop, spud lockers and scul-

leries. In addition, the doctor takes such measures as checking the week's menu for the general mess to make sure the crew is getting enough to eat and the right amounts of vitamins, minerals and the like.

During their normal, day-to-day routine *Macon's* corpsmen spend considerable time in the sick bay area, where sick call is held from 0830 to 0930 and emergency care is available 24 hours a day. There, the pharmacy and supply technician who is



hospital chief supervises the medical records office and, generally speaking, supervises the other corpsmen and takes care of administrative matters. One of the HM1s doubles as operating room technician and division petty officer. The other is both an X-ray technician and police petty officer of the division.



Of the four HM2s: One is in charge of the treatment room, where he screens patients and takes care of minor ailments and injuries; one helps keep the large assortment of records required of the department; a third serves as an assistant operating room technician and makes sure

that space is kept shipshape and supplied; and the fourth is in charge of the ward, where he maintains patients' charts and other records and sees to the medication and general comfort of the patients.

The HM3s include an assistant to the man in charge of the ward, the man who runs the medical supply room and a lab technician. The HN, as pharmacist, compounds and dispenses medicines and takes care of the record-keeping that goes along with the job. The four HAs serve as orderlies and perform a variety of jobs designed to give them a well-rounded basic knowledge.

Besides taking care of their routine duties, the men of the department are also called upon to go out in the whaleboats during man overboard drills, be on hand for helicopter launching and recovery operations, serve with landing parties, stand by during highline transfers and take part in many other activities where medical assistance might be needed. And, of course, they have battle stations throughout the ship for GQ.

In battle, *Macon's* Dental Department becomes part of the medical organization. However, during ordinary routine it's a separate outfit.

It consists of the dental and D Division officer—J. E. Sullivan, CDR, USN—one DT1 and one DA. Since *Macon's* crew numbers more than a thousand men and the Navy is authorized one dentist for every 500 men, Dr. Sullivan has a large enough practice to keep two dentists busy. He averages between 10 and 15 patients per day during regular office hours and is also available outside the regular hours to take care of emergencies. Both the DT1 and the DA assist the dentist in taking care of patients. In addition, the first class handles the property accounting and most of the other administrative and clerical work of the department.

Although D Division can make repairs to dentures, it is not equipped to offer all the services of a Navy dental installation ashore. However, as anyone who's ever had a toothache will agree, it's still a mighty handy outfit to have around when there are thousands of miles of ocean between you and the nearest shore-based dentist.

—Jerry Wolff.

Just Keeping in Touch



MACON'S VOICE BOX — Navy technicians tune one of the SRT transmitters in Radio II. Radio II is primarily a transmitter station for the heavy cruiser.

EVERY MOVE a ship makes, every port it enters or departs, every operation in which it is involved, requires one or more messages to a specific person or organization. To communications falls the unique and constant task of putting these messages through.

A great part of communications comes under the control of radiomen. Like most ships, the heavy cruiser *USS Macon* (CA 132) has three radio rooms which are loaded with complicated equipment, operated by these radiomen. These rooms are known as Radio I, Radio II, and Radio III.

Radio I contains most of the ship's receiving equipment. This includes receivers and teletypes which are set up so that each receiving position has a key for remote control of the transmitters which are located in other parts of the ship. When a message is received in the conventional manner or by teletype, it is logged in, written up, signed by the Communications Watch Officer, printed,

and delivered to department heads throughout the ship. These department heads usually initial to confirm that they have seen it, tear off a copy and take the necessary action required.

Radio I is also the headquarters of the supervisor. Before assuming his daily duties he gathers all available information concerning circuit conditions, special orders, cruising disposition, traffic on hand, acknowledgements and replies pending, guard ships, control circuits in use, frequencies guarded and transmitters in use. He also sees that all necessary publications are in the radio room. In other words, he is ready to take action on anything that might come up.

Radio II is primarily a high-powered transmitter station for the ship. The men in this space are responsible for changing and keeping transmitters in tune and selecting different frequencies used in Radio I. The selected frequency is connected to the correct key by "patch-

ing" the circuit into Radio I. This is like the old-fashioned telephone switchboard. When you call the operator (Radio II) a cord is plugged into a hole. The person you want to talk to (Radio I) is reached by plugging in the other end of the cord and the connection is complete.

Radio III is more or less a complete radio room in itself and contains several transmitters and receivers. It is set up in case anything goes wrong with Radio I or II. The operators can take complete control from here and either send or receive. It also contains its own independent power supply which can be cut in if the normal ship's power goes out.

Remote control transmitting and receiving positions are located in the bridge, flag bridge and CIC. The receivers in Radio I and transmitters in Radio II and III can be connected from these points just by dialing the desired frequency. This is important during operations, when much of the radio equipment must be patched in order to maintain constant knowledge of everything taking place within your own ship and others connected with the operation.

In order to keep all of this equipment up to peak efficiency and assure that there are qualified radiomen to operate it, there must be a constant training program.

Macon, like most other ships, has its difficulties. Transfers and separations seriously reduce the number of qualified communicators. Part of this problem was overcome during the three-and-a-half month yard period in the Boston Naval Shipyard.

With permission from *Macon's* commanding officer and the District Communications Officer, space was obtained in a building behind the First Naval District headquarters. This was furnished with tables which were wired for operating positions for 18 men. Using basic code records and oscillators, these men, striking for the rate of radioman, were soon brought up to Fleet broadcast speed of approximately 18 words per minute. This was accomplished by "pouring" the code into them for five hours a day. The remainder of the time was concentrated on copying Fleet broadcasts with introduced interference like that encountered aboard ship. The training included sending and circuit procedures.

When the ship got underway all men were assigned to watches. Advanced strikers copied Fleet broadcasts and handled Fleet circuits. Others became back-up operators. A man was advanced to copying or circuit-handling only after he was considered qualified. At the same time, those who were already qualified became assistant supervisors.

The training on board ship never seems to end. Drill circuits are in operation within the ship during General Quarters and off watch periods. Senior operators are assigned as circuit control. Monitors give necessary instruction and criticism upon completion of each drill. During General Quarters, off watch periods, and while on watch, unoccupied men are given instructions on other necessary requirements of communications. This includes basic maintenance of equipment, tuning and calibration of transmitters and receivers, and a knowledge of the capabilities of the equipment on hand.

Correspondence courses are obtained as soon as possible in addition to required "open book" courses given by division training petty officers. Upon completion of these, the men striking for radiomen of all rates must take a divisional examination. If all requirements are met and examinations are satisfactorily passed, the striker or petty officer is recommended for advancement.

Another part of communications includes the *signal bridge*. As with radio, the signal bridge is never left unattended. From here, all visual messages are handled by flaghoist, flashing light, and semaphore by the 23-man gang. The number standing watches varies in size and composition, depending upon operating conditions.

Visual messages are normally cleared through the communication office, although those of immediate importance are first delivered directly to the captain and officer-of-the-deck, or are sent out directly from the signal bridge as ordered by them.

A constant training program is being conducted for and by all men in the signal gang. Competition is stirred up when the men are divided into groups to work the two flag bags. Up will go a flag hoist from the starboard bag. Someone from the port side reads it and his gang immediately replies with flags from their bag. Then the process is re-



KEEPING IN TOUCH — Communications has the unique and constant task of putting messages through. Message begins by phone via antiaircraft control.

versed until the drill is completed. Then there is practice in sending and receiving flashing light and semaphore.

There's a reason for all this training and it paid off for *Macon* while the ship was at Guantanamo Bay, Cuba. One phase of the exercises

that ships undergo during Refresher Training includes the ability in handling a number of visual messages. Until *Macon* arrived on the scene, *uss Canberra* (CAG 2) had set the record for sending and receiving 518 visual messages based on a seven-day week. *Macon* not

FLASHY—Signal searchlight is operated from signal bridge of *USS Macon*. Visual communications are handled by members of the signal bridge gang.





TAKE A LETTER—Full complement mans Macon's flag bag and downhauls. Below: Shipboard communications is important in gun turret operation.



only tied them but went on to set a new record of 583. All 23 men shared in setting this new record.

Visual communication devices are usually divided into three major types: flashing light, semaphore, and flaghoist.

Flashing light communication is nothing more than a visual telegraphic system using the International Morse Code. Messages are sent by two general methods—directional and nondirectional. Searchlights are used to aim directional flashes at a particular receiver. The dots and dashes are determined by using a shutter to break the flashes.

Nondirectional flashes come from blinkers which are located on the ends of the yardarm and controlled by a radio key on the bridge. They can be seen in any direction. The all-around blinker lights are used mostly to send a quick and simultaneous message to a group of ships within visual distance.

Infrared rays serve as a means of sending night visual messages. A filter is placed over an ordinary searchlight to block out white or visible light and passes only the infrared rays.

Flaghoist signaling is one of the most rapid and accurate visual methods when in easy signaling distance in daytime. It normally is the primary tactical maneuvering method of transmission between surface units whenever visibility permits. Signals are repeated by the addressee, which provides a sure check on the accuracy of reception.

Semaphore and flashing light can be used interchangeably for many purposes. But semaphore is more rapid for short-distance transmission during daylight hours. Because of its speed, semaphore is better adapted to the sending of long messages. When radio silence is placed in effect, semaphore is the best substitute for handling administrative traffic during the day.

The primary functions of all communications on any ship or station is to clear outgoing traffic with a minimum of delay, receive messages correctly, and disseminate incoming information to those concerned.

To carry out these functions the skilled technicians of communications on board *Macon* stand their watches from one of the radio rooms or from the signal bridge around the clock, seven days a week.

—Thomas Wholey, JOC, USN.

ALL HANDS



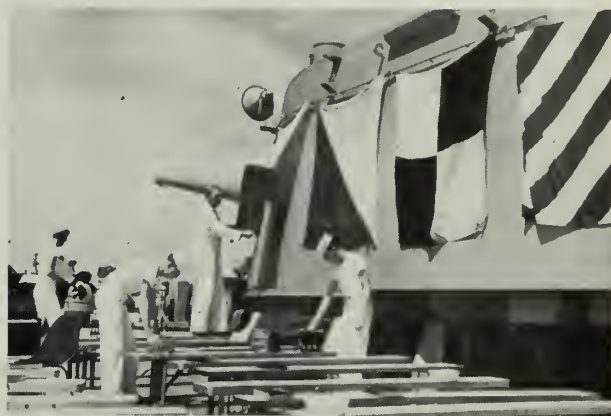
FANTAIL CHAPEL—Macon men answer church call. Below: Chaplain's assistants make ready for topside services.



Service at Sea

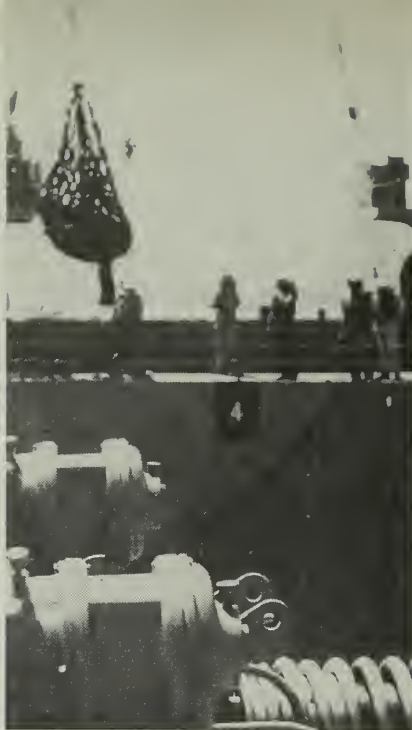
FROM THE EARLIEST days of the Navy, the Chaplain's major duties have, of course, been religious. It is his basic responsibility to conduct divine services, administer the sacraments of his church, teach the principles of his religion and officiate at religious ceremonies. No matter what his own faith, a Chaplain may offer spiritual comfort to men and women of any denomination.

As *Macon's* Chaplain, Ralph W. Below, can testify, the duties of a Chaplain may extend to many other areas. For example, among his collateral duties are supervision of charity drives, the hobby shop program, coordination of VIP affairs and planning of tours for the ship's crews. Much of his most important work is accomplished through informal chats and discussions.



SINGING SAILORS—Cruisermen sing hymns. Rt: Ship's organ is set up by M. Westfall, SA, and D. Goodwin, SN.





SHOPPING AT SEA—Important job of Supply is keeping the ship replenished while at sea. Here, ship receives order.

You Name It, They Have It

WHEN THE NEW washing machine was placed in *uss Macon* (CA 132), it marked the first time the crew in the laundry had ever seen sunlight enter their working space. This laundry, located two decks below the main deck on the port side, is about the closest you can get to perpetual motion. If you're curious as to how the sunshine came into the laundry space, you'll find the answer in the following pages.

The laundry is run 24 hours a day, seven days a week. Yet the men working in it are part of the S-3 division that has the highest reenlistment rate of any division on the ship. What's more, between 85 and 90 per cent of the men in it are enrolled in the Navy's correspondence course system.

The division is one of five in the Supply Department.

A paragraph out of *Macon's* organization manual gives a close look at the Supply Department's responsibility: "... for the procuring, receiving, stowing, issuing, and accounting of the ship's stores and parts, except as specifically assigned to other departments; the operation of the general mess and ship's store, the sales and issue of clothing and small stores; the supervision and coordination of accounting and inventory functions not specifically assigned to other departments and the supervision of disbursement."

Does this sound familiar? It should. Because supply aboard *Macon* is not much different from that of any of the other ships in the Navy.

There are five divisions in the Supply Department of *uss Macon*; S-1 (Stores), S-2 (Commissary), S-3 (Ship's Service), S-4 (Disbursing) and S-5 (Steward Branch). Each has a definite mission and a job to do.

The S-1 division has the job of keeping 18 storerooms loaded with GSK items in spare parts, electronics, machinery and ordnance. In this respect, it takes care of the ordering, stocking and issuing.

Not so long ago, keeping track of each item was often a frustrating job. All this has been changed. Possibly the change was brought on by the motto which was so well-known in boot camp—a place for everything and everything in its place. In any event, you no longer have to pore through a large box of wrenches to find one particular size. The size you want is in one box or, as it is known today, a bin.

To get to the bin stowage stage, there had to be a pre-binning stage. This was done while the ship was in Boston and involved many grueling and sometimes many hair-tearing man-hours of work.

The shipyard workers set aside one entire floor of a building where

all spare parts from the ship could be laid out, sorted, tagged, and catalogued with the new federal stock numbers and the old stock numbers. Then Stock Record Cards (some 6000 aboard *Macon*) were made out and retained by the S-1 division. As one wrench (for instance) is drawn, an item by item check is kept. Storekeepers in charge of storerooms issue the necessary supplies. And they know unless they take the necessary steps to replenish, the next time a consumer needs the same material it may not be available. So they bring the supplies up to their proper "high."

There is no real high for all items. It all depends upon how many and how often these items will be drawn. For instance, the high number of wrenches of a certain type could be 200. The low number to be reached could be set at 100. This would mean that when you took stock and the number of wrenches remaining was getting mighty close to the 100 mark, it would be time to bring them up to the high of 200 by ordering the difference of the number you have and the number you need.

This system could, and has been, carried to extremes. Take the case of the seaman who was keeping a running system of highs and lows. The idea planted in his mind was if you had a high, keep it there. So when the high for rubber hose was

set at 165 feet, he checked his card and found that there were only 164 feet on board. He put in for one foot of hose and *he got it!*

Feeding more than 1200 men in this ship is the job of the S-2 division. The setup is not much different from your own ship. But the crew of *Macon* will tell you most emphatically that she's the best feeder in either ocean.

The food is broken out of one of the five storerooms or removed from one of the six iceboxes. Meat is dressed in the butcher shop and delivered to the galley where the aroma of well-cooked food has the nasty habit of tantalizing hungry crew members as it wends its way through the vents. Food is served cafeteria-style and the menus leave nothing more to be asked. There is always plenty on hand since the ship carries a total of 300 tons of provisions. Included in this are 90 days of dry provisions and 45 days of frozen. While at sea, 180 loaves of bread are made each day in the bakery, sliced, turned over to the galley and consumed by the crew. Last year, the men in the bakery achieved their crowning success—a 400-pound ship's birthday cake.

Another division in Supply is S-5; the Steward Branch. These men prepare and serve meals for the captain, officers in the wardroom and warrant officers and are responsible for the cleanliness of the wardrooms and staterooms.

The smallest division in Supply, but perhaps the largest in the minds of the crew on the scale of economic importance, is S-4 (Disbursing) division.

In addition to paying the crew, the office provides a limited amount of tax information.

They also handle money for purchasing stamps and postal money orders for the post office and pay all public vouchers for items bought on open purchase. Paying the crew, even if it does involve handing out money at three different times on pay day (and sometimes on Sunday), is not such an arduous task. The real headache pops into disbursing before and after pay day. Each man's pay record must be computed, checked and rechecked, and a pay list typed and distributed.

The big job comes after pay day, when all stragglers have been paid. That's the time you go knocking at the door and there's no answer. You

go away mumbling to yourself, "I know they're in there. I heard someone cussin'."

They're in there. And you can believe that they are working up a sweat. Some 1200 pay chits have to be sorted, arranged in alphabetical order and the amount drawn by the individual typed on his pay record alongside the amount due. Then three men gather around. One sounds off—and pay records, pay chits and pay lists are checked against one another. This checking must come out to the dollar.

The average pay roll on *Macon* comes to a little over \$55,000. While at sea, about one-third of this amount goes back into the ship either in making out postal money orders or through one of the stores.

The responsibility for the three stores that help provide some of the comforts lies with the Ships' Service or S-3 division. These are the ship's store, soda fountain, and clothing and small stores.

On most ships and stations on pay day, one of the first places to form a long line is at the ship's store. *Macon* is no exception. It is a familiar sight to watch a man inch his way forward and then, after making his purchases, stagger away with a two-week supply of cigarettes, toilet articles and other items that help to make a sailor's life happy. There is another line leading to the clothing and small stores issue room where any of the hundreds of items of clothing can be bought to bring a seabag up to snuff.

But it's the soda fountain and the soft drink dispensers that have the

ability to draw nickels and dimes out of the sailor's pockets from one pay day to the next. In a two-and-a-half-month period aboard *Macon*, 31,000 candy bars were consumed; 11,000 seven-ounce tins of juice were purchased to help quell a growing appetite and 61,000 soft drinks came pouring out of dispensers and disappeared down the hatch. When ice cream is listed on the menu for the general mess, the two men who operate the store spend some three hours making enough ice cream to fill from 850 to 900 individual cups.

A unique system worked out by the S-3 division is the display method which is used while the ship is in foreign ports. Between meals, the tables on the mess deck are used as display cases for materials and souvenirs which are indigenous to that port. With the wares laid out in full view, the men can take a casual stroll among the tables, pick up the items they want and pay for them at the other end.

The purchases made at these stores help determine the amount of money that goes into the ship's recreation fund. Here's how it works. A specified percentage mark-up above the cost price of stock is allowed for ship's store profits. These profits are the primary source of a ship's recreation fund. But before any profits can be turned over to the commanding officer, certain deductions must be made. If the ship's store makes a profit that amounts to more than 15 per cent of its total cash sales, the amount in excess of this 15 per cent is deducted for transfer to the Ship's Store Profits, Navy, General Fund.

CLOSE TO THE HEART—Supply Department of *USS Macon* performs many tasks to make sailor's life at sea pleasant. Here, cruisermen enjoy chow time.





SOMETHING TO SMILE ABOUT — Cooks of the commissary division of USS *Macon* smile as they pose by pans of turkeys they prepared in ship's galley.

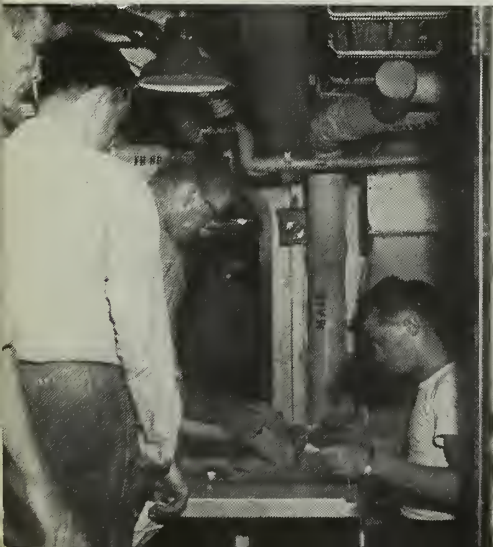
Vending machine sales and profits are excluded from this provision.

The ship's store is also assessed one-half of one per cent of the cash received from total sales. The Bureau of Supplies and Accounts makes this assessment and deposits the proceeds in the General Fund which has been set up to help ship's stores during operating emergencies and to assist in the purchase of vending machines. When this assessment is made, the ship's store is notified by letter of the amount assessed.

Another deduction from profits is made to cover any amounts obligated, such as monthly repayments of loans. A fourth deduction covers the value of any soiled, unfit or damaged items of ship's store stock that have not been covered by survey or mark-down.

After these deductions have been made, the value of material, equipment and services necessary to operate the store and its related service activities is deducted.

IMPORTANT division of Supply Department is S-4 with the responsibility of paying the crew members.



The profit that remains is transferred to the commanding officer who transmits five per cent of it to the Central Recreation Fund of the Bureau of Naval Personnel and uses 95 per cent for the ship's recreation fund.

The S-3 division is also responsible for the operation of the barber shops, cobbler shop, tailor shop and laundry.

Possibly the place whose end product comes under the closest scrutiny by the commanding officer is the Barber Shop. It has the white gleam which is so prominent in most tonsorial parlors, and is kept as neat and clean as any you'll find in any of the finer hotels.

On *Macon* the chit system is used. One hundred of these chits a day are picked up in the morning by division petty officers and distributed to those needing haircuts. The number of chits distributed to divisions depends upon the size of the division. To ease the waiting, and to help division POs let their men off to meet their appointments, the time and chair number is printed on the chit. There is no charge for barber service. And there are very few complaints from the customers.

Nor is there a charge for repair work done in the cobbler shop or the tailor shop that takes care of minor tailoring needs such as repairs, alterations, and sewing on braid and rating badges.

About that sunlight seen by the men in the laundry which is also in the S-3 division. They were having their troubles. They needed a washer large enough to handle a tremendous amount of clothes and durable enough to be run 24 hours a day, seven days a week. One was ordered.

But it proved too large to get through hatches or down ladders. There was only one thing to do—cut a hole in the side of the ship. Naturally, the side was patched and the sunlight once again shut out. But—they had their moment.

When it's your job to handle the laundry of more than a thousand men, it's a good idea to have some sort of system. Here is how the system works aboard *Macon*.

Officers' laundry is turned in Monday and returned Tuesday; CPO's, in Wednesday and returned Thursday. The laundry of the other six pay grades receives special handling. If their laundry is turned in in the morning, they get it that afternoon.

When received, the clothes are separated and if there is no identifying mark, one is stamped on. The clothes are then put into the big washer which is actually four separate washers in one—each independent of the other. The four will handle 350 pounds of clothes at one time.

Up to 15 gallons of starch can be made in the starch cooker. The correct amount is mixed with shirts and other finished products during the washing process. The clothes are removed from one of the four-in-one washers and placed in one of three extractors. Each of these will hold 73 pounds of wet clothes. After most of the water has been shaken off, the process moves on to the dryers.

When clothes come out of the dryers, flat material is run through the mangle. Other articles go to one of the presses. These include a sleeve, collar and cuff, bosom press and the standard 38-inch and 51-inch presses. With this equipment on hand, it is possible to press two suits of whites for each man every week.

When you consider that the Supply Department handles such matters as procurement, receipt, stowage, issue, and accounting for equipment, repair parts, and consummable supplies which are required to support the ship's operations, you get some idea of the job done by supply. But an underlying factor that flows through this department—noticed or unnoticed—is morale.

If you are assigned to a ship that gives you the materials to work with, pays you on time, feeds you well and keeps a well-stocked store, your own job is made easier. For this, thanks can be cast in the direction of your supply department.

—Thomas Wholey, JOC, USN.



MACON MARINES stand shipboard inspection and (right) ship's Marines receive promotions and congratulations.

Cruising Leathernecks

MARINES HAVE been serving in Navy capital ships since the beginning days of our history. You'll find a sharp unit of these sea soldiers serving on board the heavy cruiser *USS Macon* (CA 132).

The mission of the Marines of *Macon*, as well as the other ships to which they are assigned, is clearly stated:

"To provide a unit organized, trained, and equipped for operations ashore, as part of the ship's landing force; as part of a landing force of Marines from ships of the Fleet or subdivision thereof; or as an independent force for landing operations."

Although these cruiser-based Marines stand ready to perform their prescribed mission at any time, if necessary they also carry out many important shipboard duties.

When General Quarters is sounded over *Macon's* loudspeakers, the Leathernecks rush to their battle stations with the rest of the ship's crew and man two of the cruiser's 3-inch 50-caliber antiaircraft mounts.

During usual shipboard routines they furnish internal security for the ship. They stand brow watches in port and shark guard at sea. When *Macon* hauls out her big punch, *Regulus* guided missile, a special detachment of Marines stands by to keep unauthorized persons from restricted areas. Other important duties

include furnishing bank guard for the ship's disbursing officer, orderlies for the Captain, and other sentries when the occasion arises. For special guests or occasions *Macon's* Marines muster in full dress to give the proper honors.

The cruisemen are as proud of their detachment of United States Marines as the sea-going Leathernecks are proud of their sea station—*USS Macon* (CA 132).



SHARP SHOOTERS — Marines serving on board *USS Macon* do fine job manning ship's two antiaircraft mounts. Above: Honor guard stands by for visitor.



UNDERWAY TRAINING

UNDERWAY TRAINING such as that experienced by *USS Macon* while working with the Fleet Training Group out of Guantanamo Bay, Cuba, is essential in preparing for combat operations, but this must be based on plain old fashioned book learning.

For example, take the duties of a radarman serving in *Macon's* CIC. From books he learned what he would see on his screen and how to focus and tune the equipment. During underway training he achieved the skill necessary to safeguard the ship from surprise attack. But book learning served as the foundation for his skills.

Providing this book learning is the job of the Training Office on the heavy cruiser. From this small office located on the centerline of the second deck, *Macon's* training pro-

gram—which not only includes the usual USAFI and Navy Correspondence Courses, but also an elaborate Basic Shipboard Training Program—is administered.

This shipboard training program is designed primarily to provide a smooth transition from civilian to military life for young men who have been in the Navy only a short time. The program provides for both rate training and general indoctrination.

The administration of the Basic Shipboard Training Program is one of the biggest tasks assigned to the Training Office, headed by LTJG E. J. Sullivan, *Macon's* education-training officer, who is assisted by a PN1 and three YNs. A three-month program, which includes 14 different subjects for enlisted men, with a fifteenth added for junior officers,

has been developed. Division officers, junior division officers, doctors and chaplains serve as instructors.

The manual for *Macon's* training program includes such courses as: Discipline and the UCMJ, leadership, naval etiquette, safety precautions, physical fitness, security, small arms, basic damage control, rights and benefits, swimming and survival in the water, visual recognition training, character guidance and first aid. Another subject is the four-part general basic training guide: The Navy, the man, the ship, and basic seamanship. Also listed is a basic orientation study for junior officers.

A panel of technical advisers assists instructors in developing the finer points of the subjects they teach. For example, the first lieutenant and the ship's boatswain are consulted by instructors on basic seamanship,

LEARNING BY DOING at sea has to be backed up by book learning supplied by *Macon's* Training Office.



while one of the Marine Detachment officers supplies information concerning small arms. The courses are broken down into numerous sub-topics in the lesson plans provided by the training office. These outlines also include suggestions for class discussions.

For example, under the broad heading of "safety precautions" are numerous minor subjects including "safety at the mount." According to this section of the lesson plan, alertness and obedience as applied to safety should be covered by the instructor along with the definition of "silence." The individual's responsibility in handling ammunition is covered with the following points emphasized: Protect nose fuse; handle gently; and carry or pass ammunition to its destination. As the instructor finishes this phase of the safety precautions subject he concludes by stressing that safety depends on teamwork.

The principle objectives of Macon's training program are accomplished through instruction, demonstration and drills while on station and performing actual tasks. Every phase of shipboard life is covered by the program. Petty officers in charge of sections demonstrate to their men the proper techniques of cleaning hull, machinery, fittings and equipment. When possible, strikers and operating personnel carry out routine preventive maintenance procedures under the eyes of their petty officers. Every bit of repair work whether accomplished by the crew or in the yard, is utilized as an opportunity for instruction.

Watch standers are rotated from one watch to another of a different nature as soon as they are proficient at the first duty post. Manning battle stations is another opportunity for intensive training aboard Macon. The first half of the drill period is normally spent in coordinated and departmental drills, while the second half is devoted to on-station instruction by officers and petty officers.

This type of training deeply impressed a visitor to Macon when he observed a BM1 directing the launching of a small boat. The boatswain's mate had gathered his section around him and was explaining the proper way to accomplish the task and the necessary safety precautions. He followed up his lecture with a quick, but effective, question



and answer period on the lecture.

Supplementing this training is the USAFI program for which Macon is an official testing station. Some 50 to 75 General Educational Development (GED) tests are given each quarter to sailors completing their high school work, seeking college credits, or just aiming at improving the old brain. The applications for 100 or more USAFI courses are submitted each quarter through the Training Office which takes care of the necessary paperwork for the applicants. However, it is up to the men to finish the courses they start and according to LTJG Sullivan, "Most of them do, judging from the number of completion certificates that come in."

Navy Training Courses also provide a great deal of work for the Training Office staff. Some 150 training courses are requested each quar-

ter. Once they are received they are administered on a divisional level, with lessons submitted to division officers for grading.

In addition to these courses, the Training Office's large library covering nearly every naval subject and including training volumes for nearly every rate is available to men studying for advancement in rate, attempting to change their rate or just attempting to learn more about the Navy.

All requests for Navy schools, both officer and enlisted, are submitted through the Training Office. This office also administers the Fleetwide advancement tests, examinations for special programs such as the Navy Enlisted Scientific Education Program, and maintains two boards which conduct fireman and seaman examinations.

—William Prosser, JOC, USN.

Radio Macon Makes a Big Hit with Shipboard Talent

Some radio listeners like their music hot, some like it cool. Certain listeners go for an exciting report of world happenings, while others like an action packed sport-cast—but regardless of where your taste lies, *Radio Macon* aboard the heavy cruiser of the same name, provides all this and more too.

Continuous background music is piped through the ship on one of the two RBO channels assigned to the shipboard radio station while the other channel carries live broadcasts from the Armed Forces Radio Service plus programs originating in the broadcast studio on the ship's mess deck.

Radio Macon is set up in much the same manner as many civilian radio stations. It has a conventional type outlet (RBO Channel 4) for news and sports programs, and for disc jockey and special shows. Channel 3 of the RBO system is operated much like Stateside FM stations. It supplies various parts of the ship with continuous background music. In port the melodies, designed to make the daily routine easier, are usually received on FM and rebroadcast throughout the ship. At sea, long-play records are the source of the musical selections.

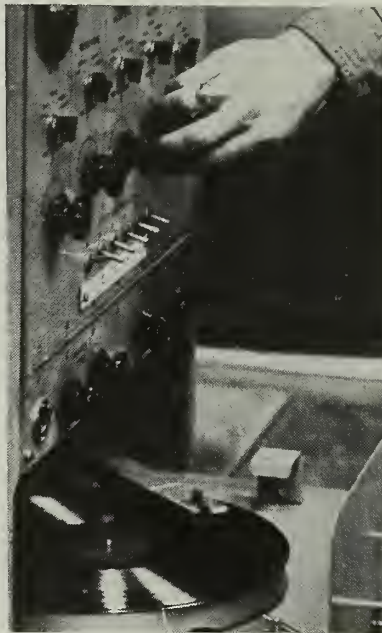
A visit to the nerve center of Radio Macon will usually find Stephen D. Lapin, SA, usn, on duty either at the console controls or repairing equipment. Lapin had technical radio training in civilian life and was a natural for the full time job of station manager because of his ability to double as a circuit trouble shooter.

Another *Maconite* who devotes a great deal of his off-duty hours to the studio is LTJG George H. Overstreet, usn, who was designated officer-in-charge of Radio Macon at its beginning. In this capacity he monitors the programs, buys supplies and trains announcers who volunteer for programs on Radio Macon. At present eight volunteers handle the announcing chores.

The broadcast studio is set up in a professional manner in a space once devoted to the electronic equipment of a 3-inch 50 cal. mount which was displaced by the *Regulus* missile installation. This port-side compartment is divided in half by the console panel. An impressive

array of instruments and switches is used by the operators to control the output on both channels and turn microphones and turntables on and off. When the station is on the air a panel-mounted loudspeaker lets the "engineer" who may be doubling as the announcer, monitor the programs originating from the two turntables used for record shows on Channel 4.

On the bulkhead beside the engineer/announcer is a powerful



shortwave set used to pull in AFRS stations when the ship is deployed or standard broadcast stations when in port. Like the FM receiver used to receive the programs of FM stations in the Boston area (*Macon's* homeport), or other East Coast cities the ship might be visiting, this receiver is wired into the station circuits so that the programs can be carried on the RBO system. Also wired into the system is the record-changer which provides the continuous Channel 3 music programs.

In the other half of the space is the desk where the live news and sports programs are written and broadcast. Also located there are the storage racks where the library of more than 80 popular records, 20 long-play albums, and 300 AFRS program discs are filed. Every couple of months this library is brought up to date by purchasing

records selected from the top 40 tunes in Boston plus selected new albums. "High Society," "South Pacific" and "The King and I" are examples of the albums on hand.

Except for the commercial receivers and record player, the station was built by ship's company. The panel was installed by the ship's carpenters and the wiring done by those familiar with the necessary procedures. The money for records and equipment was supplied by the ship's recreation fund and in its first months of operation Radio Macon has returned the investment by becoming one of the most important recreational items on the ship.

A normal day of operation will find both channels coming on the air at reveille. Channel 3 carries its background music throughout the day while Channel 4 leaves the air at 0745. The Channel 4 program schedule resumes once again at 1100 but the station shuts down at 1300 when ship's work resumes. The RBO channel remains silent until 1600 when it is air time again for Radio Macon. The programs continue until 2200 when *Macon* is at sea, but in port the station shuts down when the evening movie begins.

During broadcast hours it is not unusual to find a group of sailors sitting around outside the studio listening to the music and urging the announcer to play this or that record. In the past, the area of the mess deck around the studio has been crowded with quiz show participants or those eager to name a tune during request time programs. Music programs of all types and the AFRS shows ranging from the Lone Ranger to variety shows round out the Radio Macon schedule.

The programming future of the station is bright, with plans being made for several new shows including a series of programs on current events.

Equipment-wise the station is also growing.

Since many ships have radio stations and one even has a TV-station on board, you could not call Radio Macon unique. It is typical of what a Navy ship can do with a little enthusiasm and a lot of initiative.



Ocean Drive-In

"**N**OW THE DUTY division rig for movies topside." When this word is passed through ship's public address systems throughout the Fleet all hands gather, knowing a good time will soon start on the fantail.

Navy men at sea get the latest from Hollywood and TV kinescopes through the Navy Motion Picture Service. The films are flown to ships throughout the world to keep the Navy men up to date with what's going on in movie and TV land.

Here is a group of photographs showing the duty division of USS *Macon* (CA 132) rigging for movies topside on the fantail while the heavy cruiser is at sea for training exercises. *Starting below:* Projectors are squared away. Large screen is attached to cruiser's crane. (*Ice is to keep soft drinks cold.*) *Right:* Screen begins to unroll as crane lifts it into place. Screen in place. *Above:* Cruisemen relax and enjoy movies.



LETTERS TO THE EDITOR

YN Advancement Exams

SIR: An article in the January issue of ALL HANDS stated that the Navy Mail Course requirements for the February examinations for yeoman had been waived. Will the questions on Navy Mail which were used in the examination for YNC be included in determining the score?—H. J. P., YN1, USN.

SIR: As Senior Member of an examining board, I have been asked by yeomen who participated in the recent CPO exam if the mail questions in the examination were going to count against them or be thrown out. They cite the following notices as their reasons for asking: BuPers Note 1418 of 27 Sept 1957 which said that the Navy Mail course would be mandatory for the February 1958 examination; BuPers Note 1418 of 21 Nov 1957 which lifted the mandatory submission of the Navy Mail course for the February 1958 examination.

This same problem occurred during the August 1957 examination but, before taking it, the examinees were informed that the questions on mail would

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

not be counted. This year, no such information was given to the examinees. Could you let me know whether or not the mail questions on the February 1958 examinations for CPO will count?—R. G. B., LCDR., USN.

• *The February 1958 servicewide exams did contain questions on Navy Mail. However, when scoring exams, these questions did not count for or against those participating for advancement. The waivers, however, only applied to the February examination since the Navy Mail training manual and course became available in April.*—Ed.

Dependent's Travel

SIR: Even after reading the "Rights and Benefits" issue put out by ALL HANDS, I have come across a problem that is still not clear to me. Your article and *Joint Travel Regulations* clearly state that an enlisted man is not authorized to receive dependent's travel unless he is in pay grade E-4 with four years' service or is in a higher pay grade. However, the term "service" is not clearly defined in the travel regs.

Here is the problem I started to tell you about. I'm in pay grade E-4 and because I did not have four years' service I furnished the money to transport my wife from CONUS to my overseas duty station. When my tour is up here I will have three years, 10 months active duty in the Navy and one year of inactive duty in the Air National Guard. I realize that for pay purposes this time counts as four years' service. But does it count as four years' service for travel of dependents?—J. D. A., QM3, USN.

• *We'd like to suggest that you take a closer look at paragraph 1150.13 of "Joint Travel Regulations" which defines "Over four years' service." It says, "Service to be included in computing 'over 4 years' service' is any service authorized to be credited in computation of basic pay pursuant to section 202 of the Career Compensation Act of 1949, as amended."*

Using this reference and the basis of

information contained in your letter, you are entitled to return transportation for your dependents at government expense.—Ed.

Storing Civilian Clothes

SIR: We heard recently that a naval air station had granted all enlisted personnel the privilege of wearing civilian clothes while in off-duty status and allowing the civilian garments to be stored aboard the station. Previously only petty officers were granted this privilege. Under the new order, personnel in the lower three pay grades are granted civilian clothing passes after each man has shown that he has a full seabag.

I would like to know how official action on this matter might be initiated at our station. Enlisted Waves already have this privilege and we hear that other bases have granted civilian clothes passes to all of their personnel.

Do you have any information on this subject?—P. D., AN, USN.

• *"U. S. Navy Uniform Regulations" state that enlisted personnel may be permitted to have civilian clothing in their possession at naval activities ashore if authorized by the commanding of-*

Billets for Guided Missilemen

SIR: Please advise me on the shore duty billets open to the guided missile rating with particular attention to recruiting duty and NROTC duty.

Also, what Stateside shore duty billets are open to other ratings such as GM, TM, EN and ET which carry the *Regulus* missile primary job code number.—W. E. C., ET1 (SS), USN, M. O. T., GS1(SS), USN.

• *Shore duty billets for guided missilemen with Regulus missile classification code and other ratings trained in the jet-propelled surface-to-surface missile are located at the Guided Missile School, Dam Neck, Va; Guided Missile Unit 55, Port Hueneme, Calif; and NAMTC, Pt. Mugu, Calif. At the present time there are no GS or ET ratings in the allowances of NROTC units and guided missilemen are not included in the allowances of Recruiting Stations. However, they may be ordered to recruiting duty on an equal basis with other eligible ratings.*

Other GS billets for Terrier and Talos missilemen are located in Com 1, 5, 6, 8, 9, and 11.—Ed.

Age Limit for NEASP

SIR: I have noted a discrepancy between the article appearing on pages 52 and 53 of your December 1957 issue and BuPers Inst. 1510.69B concerning the Navy Enlisted Advanced School Program.

The instruction states that an applicant must not have attained the age of 25 by 1 July of the year originally selected. The ALL HANDS article states: "In its revised instruction (BuPers Inst. 1510.69B), it has raised the age limit from 25 years to 30 years." It would be appreciated if this could be cleared up, as I have several people who are interested in this program, but unable to take advantage of it owing to the 25-year age limit.—J.J.R., YNC, USN.

• *No discrepancy, we're happy to say. The age limitation was changed from 25 to 30 by a correction to BuPers Inst. 1510.69B published with the transmittal sheet of Navy Instructions and Notices dated 25 Oct 1957. The correction reads, "On page 3, change paragraph 5b to read as follows: 'Have at least three years' active naval service and not have attained the age of 30 by 1 July of the year originally selected.'"*

—Ed.

ficer. They may wear civilian clothes while on leave and liberty and may wear them to and from shore activities when so authorized by the commanding officer.

The wearing and stowing of civilian clothes on station is a privilege granted only by the commanding officer to deserving personnel and is dependent on the mission of the station, its physical layout, barracks arrangement, recreational facilities and security requirements.

Such a privilege, if granted, would undoubtedly increase morale but it is impracticable to grant at all stations. There is no official action for you to initiate other than to request that your commanding officer consider granting this privilege.—Ed.

Insignia of Other Services

SIR: I am a seaman with prior service in the U.S. Army and am entitled to wear the "Combat Infantry Badge." I have received conflicting information concerning the wearing of this badge on my Navy uniform and have been unable to find definite information concerning this in either *Uniform Regulations* or the *Awards and Decorations Manual*.

Am I authorized to wear this badge on my Navy uniform, and if so, under what circumstances?—C.D.S., SN, USN.

• We are certain that you view this badge with great pride and well you should. However, U.S. Navy Uniform Regulations do not authorize you to wear it on your Navy uniform.

The *Combat Infantry Badge* is classed in the Army as a *Ground Badge* and is awarded for satisfactory performance of duty while assigned or attached as a member of an infantry unit of regimental or smaller size during any period such unit was engaged in active ground combat. Other badges in the general category of *Ground Badges* include *aviation badges* and *parachutist badges*.

In the Navy, badges of this type are classed as *insignia*. The wearing of in-



THROUGH SUNNY SEAS—USS *Floyd's Bay* (AVP 40) cruises in Pacific waters off Point Loma. Home port for the small seaplane tender is San Diego.

signia earned while in another service is not permitted on the naval uniform. The only specific reference to this in "Uniform Regulations" is found in Article 1203.2(b).—Ed.

Retired Pay at Highest Rank

SIR: I have been told I will be reverted to my permanent status—CWO, W-4—in the very near future. Since I have completed over 23 years of service, I have the option of either reverting, or retiring now.

If I did choose to retire now it would be as LCDR with 23 years' service, which means I would draw \$331.89 a month in retirement pay. However, if I reverted and remained on active duty for four more years as W-4, and could then retire after 27 years' service, my retirement pay would come to \$400.14 per month—if it were based on the pay of LCDR with that much service.

Therefore, my question is: If I remain on active duty for the extra four years, will I be retired as LCDR, or as W-4?—J. C. O., LCDR, USN.

• Technically, you'd be retired as a W-4. But, according to BuPers Inst.

1811.1A, you would be advanced to the rank of LCDR on the Retired List after your retirement, and you would be entitled to retired pay based on that rank (providing, of course, that the Secretary of the Navy determined that your service as LCDR was satisfactory). The retired pay based on the higher grade would be effective from the date of retirement. In other words, you would get the \$400.14.—Ed.

NEASP Time Counts

SIR: As I understand it, to be eligible for the NEASP (Naval Enlisted Advanced School Program) one must obligate himself for six years. In the case of a Reserve on active duty, he will be enlisted into the regular Navy with equivalent rate, for six years.

The first two years will be spent in some university, and the man will draw the pay and allowances of his rate.

Can you supply me with answers to the following: (1) Exactly how will this time spent in school count or be computed for retirement purposes? (2) Will a Reservist, regardless of rate or rating, be eligible for reenlistment bonus? (3) Approximately how many men per year will be selected for this program? (4) What would happen with a man failing this program?—E. A. L., USNR (TAR).

• Time spent in school (NEASP) will count as any active duty time for retirement purposes. Provided a Reservist has served on active duty for a period of one year before enlisting in the Regular Navy, he will be eligible for reenlistment bonus. This will apply to personnel in both open and closed ratings. However, only those personnel selected will be enlisted in the Regular Navy. Approximately 100 men a year will be selected for the NEASP. Personnel who fail are permitted to convert horizontally to the rating that was held upon entry, or convert to any rating for which they can qualify.—Ed.



THOR SPOT—Cable laying ship USS *Thor* (ARC 4) rests in San Francisco Naval Shipyard after having been in drydock receiving her regular overhaul.



OLD TIMER—USS Indianapolis (CA 35) sits for portrait in 1939. She was sunk by enemy sub in Pacific just two weeks before the end of WW II.

Sinking of Indianapolis

SIR: I've often heard that the cruiser USS Indianapolis (CA 35) was carrying an atomic bomb when she was sunk by a Japanese submarine. Is this true or not?—G. S., AM1, USN.

• That story is often told, but it's strictly scuttlebutt.

Indianapolis, in a high-speed run had delivered essential atomic bomb materials to Tinian but had completed that mission when she was sunk. After delivering her special cargo to Tinian, Indianapolis was dispatched to Guam to discharge certain passengers and then proceed to Leyte.

While steaming from Guam to Leyte on 30 July 1945, Indianapolis was torpedoed twice by the Japanese submarine I-58. She sank in 12 minutes. About 300 members of her crew were

later rescued and more than 875 were killed or reported missing.

The loss of Indianapolis was considered to be one of the most tragic of World War II. Launched in 1932, the heavy cruiser had served from Pearl Harbor through the last campaign of the war and went down a scant two weeks before the war's end.—Ed.

Performing Tug

SIR: R. L. Weinrich, QMC, of USS Penobscot (ATA 188) has a right to be proud of his ship's record as he presented it in your March issue. However, it must be remembered that movement orders come from a source other than the ship itself and the number of miles steamed and the work accomplished depends on these orders.

The record of our ship, USS Accokeek (ATA 181) is not as impressive for 1957, but we will match it with pride against any other Atlantic or Pacific Fleet tug. Regardless of the outcome, I know that Accokeek did its job as did all other seagoing tugs.

Accokeek steamed approximately 17,000 miles in 1957 and thus far in 1958 we have steamed 18,723 miles which includes a trip across the Equator. The USS Umpqua (ATA 209), and possibly other ATAs, has an Equator crossing to her credit.

Each Navy ship has an assigned duty to perform and I am sure each has done and will continue to do that work with credit to itself and the Navy.—H. K. S., RM3, USN.

• Your last paragraph sums it all up very nicely.—Ed.

USS Washington

SIR: Would you please tell me the month, date and year that the battleship USS Washington (BB 56) was commissioned, and a little bit of her history?—A. M. J., TM1, USN.

• Washington was the second (and last) ship in the famous North Carolina class of 1937 to join the Fleet. She was commissioned at the Philadelphia Naval Yard on 15 May 1941, just a month after USS North Carolina (BB 55) became a member of the Atlantic Fleet. These were the first two battleships to be added to the U. S. Navy since 1 Dec 1923 when USS West Virginia (BB 48) was entered on the rolls, but eight others were soon to follow as the United States added to its battle Fleet during the war years.

Washington was a powerful addition to our Fleet. Displacing 35,000 tons, the 729-foot-long battleship carried nine 16-inch 45 cal. rifles and numerous smaller weapons. When the war broke out, Washington was ordered to report to Commander Naval Forces, Europe, at Scapa Flow, Scotland. In mid-1942 she returned to New York for overhaul and a short time later steamed into the Pacific.

In November 1942 American naval forces were concentrating on landing fresh troops on Guadalcanal and attempting to keep the enemy from bringing in reinforcements and supplies. With the later thought in mind, Task Force 64 steamed into the area east of Savo Islands to intercept an enemy transport force which had been reported approaching the Solomons.

Washington was flagship, backed up by USS South Dakota (BB 57) and four destroyers. The force intercepted at night a Japanese bombardment group composed of a battleship, two heavy cruisers, two light cruisers and nine destroyers. Two other destroyers joined the Japanese force later in the action.

The Japanese force split into three groups, presenting a confusion of tar-

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• USS Portland (CA 33)—The second biannual reunion will be held in Chicago, Ill., on 8, 9, and 10 August. Information is available from Henry Dieterich, 800 Massena Ave., Waukegan, Ill.

• USS Quincy (CA 71)—The seventh reunion will be held on 15, 16 and 17 August at the Hotel Essex, Boston, Mass. For further details, write to Ed Moore, 173 Carlton Terrace, Teaneck, N. J.

• 82nd Seabees—519th CBMU—The twelfth annual reunion will be held on 26-27 September. For further information, write to James Greenwood, 147 Bathurst Ave., North Arlington, N. J.

• USS Chester (CA 27)—All who served on board from 1 Jan 1942 until 1 Jan 1946, and who are interested in holding a reunion in New York City this fall may write to Leonard L. Oettinger, Jr., Box 192, Kinston, N.C.

• USS LCI 615—All former members who served on board from May 1944 until September 1955, and who are interested in holding a reunion, with time and place to be decided by mutual consent, may write to Dennis McCarty, 214 West Elm St., Hartford City, Ind.

gets to the U. S. task force. A short time after the action began, the four American DDs were out of action. Two had been sunk and the other two so seriously damaged that they had to withdraw, leaving the battleships without escorts.

Searchlights caught South Dakota as she maneuvered to avoid the burning destroyers and she was exposed to the combined Japanese bombardment group. She returned the fire with everything she had, and Washington chimed in with her 16-inch guns, raining salvo after salvo onto the battleship Kirishima and dividing her five-inch fire between the enemy BB and the ships illuminating South Dakota. Within seven minutes Kirishima was out of the fight, her steering gear wrecked and her topsides aflame. The cruiser Atago and Takao had also been damaged.

The damaged South Dakota was forced to retire to the south while Washington steamed north to draw the bombardment group away. The enemy force followed BB 56 but her big guns soon discouraged the ships and skillful maneuvering enabled her to avoid a torpedo attack.

The next day the burning Kirishima was scuttled by her crew along with a seriously damaged Japanese destroyer.

Washington fought on during the rest of the war years, passing from one operation, landing or battle, to another and when the peace came in 1945 she had earned 13 battle stars. In mid-1947, six years after she was commissioned, the battleship was placed out of commission in reserve.

With the recent addition of our last battleship, USS Wisconsin (BB 64), to the Reserve Fleet the total number of BBs standing by in mothballs rose to 15. Included with Washington and Wisconsin are Tennessee (BB 43), California (BB 44), Colorado (BB 45), Mary-

Here Are Some Pointers on Using a Bosun's Chorus

SIR: Lovette's Naval Customs, Traditions, and Usage indicates that the setting of the first watch upon commissioning of a ship is particularly effective when "boatswain's mates take up the piping fore and aft." If memory serves correctly I believe I have seen this interpreted as having the boatswain (if assigned) or the chief boatswain's mate plus a "Bosun's Chorus" of rated BMs pipe the first watch in unison.

Have you available any information, pro or con, concerning this matter.—C. W. J., LT, USN.

• The use of a "Bosun's Chorus" as suggested in your letter is an accepted practice in some circles; one, it might be added, that lends additional pomp to the already impressive commissioning ceremony. The Commissioning Bill of USS Saratoga (CVA 60) quoted in part here, indicates the use of the chorus:

"The Executive Officer answers 'Aye Aye, Sir,' and orders the Navigator: 'Navigator, take the first watch as Officer of the Deck' and hands the OOD long glass to the Navigator, who salutes and replies, 'Aye Aye, Sir,' and proceeds to the First Section. The Executive Officer orders the Ship's Boatswain: 'Pass the word. Set the watch on deck, first section.' The

Ship's Boatswain and Mates (three or four) pipe and then pass the word: 'Set the watch on deck, first section.'"

Your interpretation of piping "fore and aft" is correct, but it must be remembered that this term is a carry-over from the days when ships were not equipped with loudspeaker systems. Now that they are so equipped, the piping is usually done from the quarterdeck or from the scene of the ceremony where it adds a nautical note to the activities.

The fact that this piping is usually done at the scene of the ceremony can be seen in this example of a DDR-type ship commissioning bill (an enclosure to a Fifth Naval District instruction). The pertinent area reads:

CDR to LT: "Set the watch."

LT: — "Aye Aye, Sir. Chief Boatswain's Mate, set the watch, First Section."

BOSN: — Pipes and passes word, "Set the watch on deck, First Section."

The watch squad falls out and proceeds on the double to man stations.

Regardless of whether a single pipe is used or a chorus, the commissioning ceremony is one of the most important military rites performed aboard a ship. It literally sets the tone for the future life of the ship.—ED.

land (BB 46), West Virginia (BB 48), North Carolina (BB 55), South Dakota (BB 57), Indiana (BB 58), Massachusetts (BB 59), Alabama (BB 60), Iowa (BB 61), New Jersey (BB 62) and Missouri (BB 63). Kentucky is also listed in the Naval Vessel Register, but construction was suspended before com-

pletion and she was never commissioned.

Since the last battleship has been placed out of commission we hope to be able to bring you a story soon, relating a few of the exploits recorded by these magnificent ships-of-the-line. Be it progress or not, Navymen everywhere miss the battleship.—ED.

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THE BULLETIN BOARD

There Are More Benefits Than You Realize in New Pay Bill

BY NOW YOU should have had the opportunity to cash in on the benefits of Public Law 85-422. This is the law which amends the Career Compensation Act of 1949 (as amended), and is designed to reduce the manpower turnover and to give the armed forces greater selectivity in retention of highly qualified personnel. To the average Navyman, this law is commonly referred to as "the new pay bill."

True, it is a new pay bill, but to the career Navyman, Public Law 85-422 is much more than that. It provides for:

- **Higher Basic Pay Scales**—Since everybody is talking about the "new pay bill," we'll cover that portion of the law first. As of 1 Jun 1958, all enlisted and officer personnel having more than two years' service were granted raises in their basic pay. Added increases are also provided every two years until a maximum time-in-grade is reached. As an example:

A PO3 with four years' service drew \$159.90 basic pay per month under the old pay bill. He now draws \$170. After six years he'll receive \$180 per month, and with over eight years' service his basic pay will jump to \$190 monthly. It stops there, however, when a PO3 has reached his maximum time-in-grade. The biennial basic pay increases for a PO2 stop after 10 years' service; after 18 years for a PO1, and after 20 for a CPO. Therefore enlisted men, and officers as well, must earn a promotion in order to get a pay raise after serving the maximum time-in-grade.

A CPO with 12 years' service now receives \$300 basic pay per month compared to \$273 under the old bill. The new bill provides \$10 and \$15 increases every two years thereafter until \$350 is reached at 20 years, the maximum time-in-grade for a CPO.

While the 12-year Chief gets a \$27 monthly boost, a LT with over six years' service receives a \$34.40 increase, and the basic pay for a CDR with over 16 years' jumped from \$577.20 to \$680 per month.

Don't forget that you must allow

for deductions for income and social security taxes before you start spending your money. To give you an idea of how these deductions affect your raise, we'll assume that the same PO3, Chief, LT and CDR cited above, has three dependents each—a wife and two minor children.

The PO3, with three dependents will not be required to pay any income taxes. Therefore, his raise is about \$11 a month—almost the same as shown on the pay charts. His only added monthly deduction will be about \$.20 for social security payments. The Chief would come out about \$24 ahead after deductions for social security and income taxes. The LT's \$35 raise will amount to \$32 after taxes, and the Commander's \$680 basic pay will add up to about \$583, which would give him an additional \$75 a month take-home pay. (See accompanying Pay Chart.)

The new law also provides a special basic pay scale for commissioned officers in pay grade O-1 through O-3 who have previously had over four years of active enlisted service.

Under this new scale, the basic pay for an O-1 with over four years' active enlisted service begins at \$314 and goes up as high as \$400 per month, while the basic pay of an ensign without any enlisted service begins at \$222.30, and \$314 is the most basic pay that he can draw.



"And when did you first feel run down?"

Allowances for housing, as well as hazardous duty pay were unchanged by the new pay bill. They remain the same as shown on page 8 of the special Rights and Benefits issue of ALL HANDS published in May 1957.

- **New Pay Grades Established**—New pay grades E-9 (Master Chief Petty Officer) and E-8 (Senior Chief Petty Officer) for the enlisted structure, and pay grades O-10 (Admiral—four star rank) and O-9 (Vice Admiral—three star rank) in the officers' pay structure have been established. Formerly Admirals and Vice Admirals received the basic pay of a Rear Admiral (O-8) but were allowed additional increment pay each month. Under the new pay bill, ADMs and VADMs receive basic pay figured on a somewhat higher scale than a RADM but receive the same basic allowance for subsistence and quarters as a RADM does.

The two new enlisted pay grades enable an E-9 to earn as much as \$440 basic pay per month. Formerly the most basic pay a senior enlisted man (E-7) could make was \$335.40 a month after 26 years' service. That's \$104.60 per month less than the new all-time high.

During the next four years the Navy plans to select 2800 E-9s and 8600 E-8s. The new law limits E-9 advancements to one per cent and E-8 to two per cent of the total enlisted strength of each service. These promotions will be phased in over a four-year period.

Advancements to the two new enlisted pay grades will be based on competitive examinations and by selection boards. The first exams are slated for August '58 with Master and Senior Chief Petty Officer promotions becoming effective in November '58. Exams will be held annually in February thereafter.

To be eligible for Senior Chief Petty Officer (E-8) you must have been a CPO (E-7) for four years and have a total of 11 years' service. The requirements for promotion to Master Chief, the Navy's senior enlisted pay grade, call for 13 years' of service.

Sea and hazardous duty pay, BAQ and BAS for E-8s and E-9s will be the same as that prescribed under the old bill for E-7s.

• **Proficiency Pay**—The new law provides two methods for awarding proficiency pay to certain enlisted personnel. It contains authority to promote career personnel with critically needed skills and leadership qualifications to pay grades above their military rank. Thus, a third class petty officer drawing proficiency pay could receive the pay of an E-5 or E-6. The other method provides authority to give proficiency pay of \$50, \$100 or \$150 a month to enlisted personnel, depending on the degree of their skill and the requirements of the service.

Under the second alternative, an E-9 drawing a basic pay of \$440 per month could receive, in addition to other pay and allowances, as much as \$150 more per month in proficiency pay. If such were the case, a Master Chief Petty Officer's annual income would be as much as \$10,000 per year.

The Navy's plans for implementing proficiency pay have not been announced as yet, but will be covered in a future issue of ALL HANDS.

• **Responsibility Pay**—Special "responsibility pay" for officers was authorized under the legislation amending the Career Compensation Act. This extra pay will go to officers serving in "assignments of extraordinary responsibility and critical necessity." Pay authorized is \$150 for

Fleet Reserve Pay

Here's how you'll fare as far as retired/retainer pay goes under the new pay bill:

YEARS OF ACTIVE SERVICE	RETAINER AND RETIRED PAY FOR		
	E-7	E-8	E-9
*19½-20	175.00	185.00	215.00
20½-21	183.75	194.25	225.75
21½-22	192.50	209.00	242.00
22½-23	201.25	218.50	253.00
23½-24	210.00	228.00	264.00
24½-25	218.75	237.50	275.00
25½-26	227.50	247.00	286.00
26½-27	236.25	256.50	297.00
27½-28	245.00	266.00	308.00
28½-29	253.75	275.50	319.00
29½-30	262.50	285.00	330.00

* The retainer pay for a Navyman transferring to the Fleet Reserve upon completion of 19 years, six months and 10 days of active service, is the same as if he completed a full 20 years' active service. This is because a six-month period is counted as a full year when computing basic pay as well as the number of years' of active service for retired/retainer pay purposes. (See Article C-13405, BuPers Manual.)

pay on 31 May 1958 shall be entitled to an increase of six per cent of the pay to which they were entitled as of that date. The increase will be given automatically to those receiving monthly payment from the Navy Finance Center and no action is required by those on retired rolls.

Those retiring or transferring to the Fleet Reserve on or after 1 Jun 1958 will receive retired/retainer pay based on the rates under the new pay bill or on the old pay bill plus a six per cent increase, whichever is the greater. (See accompanying box listing rates of retired retainer pay computed at the rate of two and one-half per cent of the new basic pay multiplied by the number of years of active service.)

• **"Saved Pay Clause"**—Another feature of the revised Career Compensation Act (Public Law 85-422) is the "Saved Pay Clause" which provides that no person, active or retired, will suffer by its enactment any reduction in basic or retired pay he was entitled to on 31 May 1958.

CAPTs (0-6); \$100 per month for CDRs (0-5); and \$50 for LCDRs (0-4) and LTs (0-3). Awarding of this additional pay is limited to 10 per cent of the officers in pay grade 0-6, 0-5, 0-4, and five per cent of those in pay grade 0-3.

• **Retired Pay**—With minor exceptions, the act provides that any person entitled to retired pay, retirement pay, retainer pay or equivalent

Announcement of Latest Appointments to WO

Three first class and 9 chief petty officers have been issued temporary appointments to Warrant Officer, W-1.

These appointments are from an eligibility list established by a selection board convened in February 1957.

Table of Active Duty Service Pay Under New Law

RANK OR PAY GRADE	MONTHLY BASIC PAY (BASED ON CUMULATIVE YEARS OF SERVICE, ACTIVE AND INACTIVE)														
	Under 2 years	Over 2 years	Over 3 years	Over 4 years	Over 5 years	Over 6 years	Over 8 years	Over 10 years	Over 12 years	Over 14 years	Over 16 years	Over 18 years	Over 20 years	Over 22 years	Over 26 years
O-10 Admiral	\$1,200.00	\$1,250.00	\$1,250.00	\$1,250.00	\$1,250.00	\$1,300.00	\$1,300.00	\$1,400.00	\$1,400.00	\$1,500.00	\$1,500.00	\$1,600.00	\$1,600.00	\$1,700.00	\$1,700.00
O-9 Vice Admiral	1,063.30	1,100.00	1,122.00	1,122.00	1,122.00	1,150.00	1,150.00	1,200.00	1,200.00	1,300.00	1,300.00	1,400.00	1,400.00	1,500.00	1,500.00
O-7 Rear Adm. (Up. Hlf.)	963.30	1,000.00	1,022.00	1,022.00	1,022.00	1,100.00	1,100.00	1,150.00	1,150.00	1,200.00	1,200.00	1,250.00	1,250.00	1,350.00	1,350.00
O-7 Rear Adm. (Low. Hlf.)	800.28	860.00	860.00	860.00	900.00	900.00	950.00	950.00	1,000.00	1,000.00	1,000.00	1,175.00	1,175.00	1,175.00	1,175.00
O-6 Captain	592.80	628.00	670.00	670.00	670.00	670.00	670.00	670.00	670.00	690.00	690.00	840.00	840.00	910.00	985.00
O-5 Commander	474.24	503.00	540.00	540.00	540.00	540.00	540.00	540.00	540.00	590.00	590.00	720.00	745.00	775.00	775.00
O-4 Lieutenant Commander	400.14	424.00	455.00	455.00	455.00	465.00	465.00	520.00	550.00	570.00	610.00	630.00	630.00	630.00	630.00
O-4 Lieutenant	326.04	346.00	372.00	415.00	440.00	440.00	460.00	480.00	510.00	525.00	525.00	525.00	525.00	525.00	525.00
O-3 Lieut. (Jr. gr.)	259.36	291.00	360.00	370.00	380.00	380.00	380.00	380.00	380.00	380.00	380.00	380.00	380.00	380.00	380.00
O-1 Ensign	222.30	251.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00	314.00
O-3 E*				\$415.00	\$440.00	\$460.00	\$480.00	\$510.00	\$535.00	\$535.00	\$535.00	\$535.00	\$535.00	\$535.00	\$535.00
O-2 E*				370.00	380.00	395.00	415.00	435.00	450.00	450.00	450.00	450.00	450.00	450.00	450.00
O-1 E*				314.00	335.00	350.00	365.00	380.00	400.00	400.00	400.00	400.00	400.00	400.00	400.00
W-4 (Chief W. Off.)	\$332.90	\$376.00	\$376.00	\$383.00	\$399.00	\$416.00	\$435.00	\$465.00	\$486.00	\$504.00	\$516.00	\$528.00	\$543.00	\$575.00	\$595.00
W-3 (Chief W. Off.)	302.64	343.00	343.00	348.00	353.00	380.00	398.00	412.00	427.00	441.00	458.00	470.00	487.00	506.00	506.00
W-2 (Chief W. Off.)	264.82	298.00	298.00	307.00	328.00	342.00	355.00	369.00	381.00	393.00	406.00	417.00	440.00	440.00	440.00
W-1 (Warrant Officer)	219.42	266.00	266.00	287.00	299.00	313.00	334.00	345.00	354.00	364.00	375.00	390.00	390.00	390.00	390.00
E-9 (Master Chief Petty Officer)							\$380.00	\$390.00	\$400.00	\$410.00	\$420.00	\$430.00	\$440.00	\$440.00	\$440.00
E-8 (Senior Chief Petty Officer)							330.00	320.00	330.00	340.00	350.00	360.00	370.00	380.00	380.00
E-7 (Chief Petty Officer)	\$206.39	\$236.00	\$236.00	\$250.00	\$260.00	270.00	285.00	300.00	310.00	325.00	340.00	350.00	350.00	350.00	350.00
E-6 (Petty Off. 1st Cl.)	175.81	200.00	200.00	225.00	235.00	245.00	255.00	265.00	275.00	280.00	290.00	290.00	290.00	290.00	290.00
E-5 (Petty Off. 2nd Cl.)	145.24	180.00	180.00	205.00	210.00	220.00	240.00	240.00	240.00	240.00	240.00	240.00	240.00	240.00	240.00
E-4 (Petty Off. 3rd Cl.)	122.30	150.00	160.00	170.00	180.00	190.00	190.00	190.00	190.00	190.00	190.00	190.00	190.00	190.00	190.00
E-3 (SN, FN, AN, CN, TN, HN, DN)	99.37	124.00	124.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00
E-2 (SA, FA, AA, CP, TA, HA, DA)	85.80	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00	108.00
E-1 (Over 4 months) (SR) (Etc.)	83.20	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00	105.00
E-1 (Under 4 months) (SR) (Etc.)	78.00														

* Commissioned officers who have been credited with over 4 years' active service as an enlisted member.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

Alnavs

No. 12—Concerned with amendments to the Career Compensation Act of 1949, which increases the rates of basic pay, establishes new pay grades O-9, O-10, E-8 and E-9, and certain other matters.

No. 13—Urged safe driving over the holidays.

No. 14—Ordered national ensign to be flown at half mast in honor of unknown dead of World War II and Korean conflict.

Instructions

No. 1210.4B—Revises the billet and officer designator code system.

No. 1326.1B—Establishes a uniform procedure for the administration of the allocation, issuance, utilization, and reporting of temporary flight orders for Navy enlisted personnel.

No. 1412.11—Sets forth the current policy concerning assignment to duty with Joint, Combined, Allied and Office of the Secretary of Defense staffs.

No. 1416.7—Describes the standards and methods of establishing physical qualifications for promotion of USN and USNR officers in the grades of lieutenant (junior grade) and above, and warrant officers on active duty.

No. 1500.15C—Outlines the procedures followed in the selection of candidates for diving instruction and lists activities authorized to conduct diving training for officers and enlisted personnel.

No. 1510.69C—Outlines eligibility requirements and procedures whereby enlisted personnel may apply for selection to either the Navy Enlisted

HTG Launches Its Own Course in Leadership

Even before last month's centerspread on leadership had gone to press and the stepped-up leadership program had been officially announced, the Navy's Helicopter Training Group at Ellyson Field, Pensacola, Fla., had launched its own training course in leadership for chief and first class petty officers.

This refresher course was established by CAPT J. J. Hilton Jr., CO of HTG, to enable PO1s and CPOs to assume more effectively their role in the chain of command.

The four-week course—limited to 12 students per class—covers subjects ranging from the principles of leadership to human relations, management principles and even thinking habits.

Advanced School Program or the Navy Enlisted Scientific Education Program.

No. 1520.4D—Invites applications from USN and USNR officers of unrestricted line or LDO categories (other than aviation) for assignment to deep sea diving instruction.

No. 1520.48B—Describes the college training program for eligible augmented and integrated USN commissioned line officers, but not restricted line, with permanent grade of ensign and above.

No. 1560.15—Announces an increase in the initial enrollment fee for USAFI correspondence courses

and other changes in USAFI enrollment policies and procedures.

No. 1813.3—Provides for the deferment of transfer of individuals to the Fleet Reserve in certain instances.

No. 4650.60—Informs naval personnel ordered to duty in Japan of policies concerning concurrent travel, and describes the housing situation.

Notices

No. 1430 (21 April)—Cited the advancements resulting from the February service-wide examinations and the opportunities which it is estimated will result from the August and November service-wide examinations.

No. 1306 (30 April)—Reemphasized the requirement of Art. C-5403A of the *BuPers Manual*, and discussed a procedure by which unnecessary travel can be eliminated.

No. 1306 (1 May)—Established the sea-tour commencement dates for enlisted personnel to be eligible for Seavey Segment Three, effective for order writing purposes on 1 October.

No. 1611 (5 May)—Announced the names of those officers selected for retention as permanent USN officers.

No. 1700 (7 May)—Announced the Fifth All-Navy Talent Contest.

No. 1020 (8 May)—Authorized the use of the blue raincoat by commissioned and chief petty officers for an indefinite period.

No. 1520 (28 May)—Notified the naval service of a program of seminar training in professional subjects for chaplains on active duty.

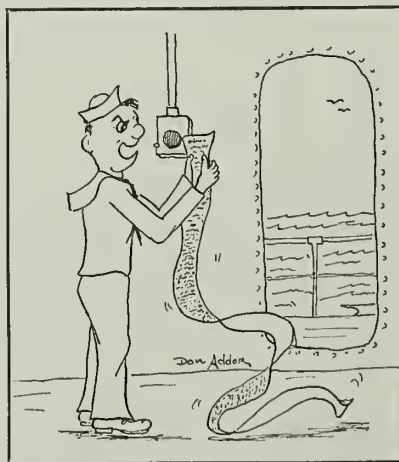
No. 1900 (29 May)—Emphasized the necessity for correct distribution of DD Form 214.

Wave Enlistments Shortened From Four to Three Years

The minimum term of service for enlisted women has been reduced from four to three years.

The reduction stems from the belief that a four-year term of service is too long a period of time for a young woman to obligate herself when she is undecided as to her future career.

An enlistment contract of three years for women will enable the Navy to fill its enlisted requirements for women and at the same time increase selectivity of applicants.



"Now hear this"

List of New Motion Pictures Scheduled for Distribution To Ships and Overseas Bases

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in May.

Hunchback of Notre Dame (1064) (C) (WS): Drama; Gina Lollobrigida, Anthony Quinn.

I Accuse (1065) (WS): Drama; Jose Ferrer, Anton Walbrook.

Pal Joey (1066) (C): Musical; Frank Sinatra, Rita Hayworth.

Decision at Sundown (1067) (C): Western; Randolph Scott, John Carroll.

Cowboy (1068) (C): Drama; Glenn Ford, Jack Lemmon.

Escapade in Japan (1069) (C) (WS): Drama; Teresa Wright, Cameron Mitchell.

Escape from Red Rock (1070) (WS): Western; Brian Donlevy, Eilene Danssen.

Summer Love (1071): Drama; John Saxon, Molly Bee.

Fort Dobbs (1072): Western; Clint Walker, Virginia Mayo.

Wild is the Wind (1073): Drama; Anna Magnani, Anthony Quinn.

High Cost of Loving (1074) (WS): Drama; Jose Ferrer, Joanne Gilbert.

The Deerslayer (1075) (C) (WS): Drama; Lex Barker, Rita Moreno.

Missouri Traveler (1076) (C): Drama; Brandon DeWilde, Lee Marvin.

Lafayette Escadrille (1077): Melodrama; Tab Hunter, Etchika Choureau.

The Girl Most Likely (1078) (C): Comedy-Drama; Jane Powell, Keith Andes.

The Lady Takes a Flyer (1079) (WS): Drama; Lana Turner, Jeff Chandler.

The Female Animal (1080) (WS): Comedy-Drama; Hedy Lamarr, Jane Powell.

Blood Arrow (1081) (WS): Western; Scott Brady, Paul Richards.

The Crooked Circle (1082)

(WS): Drama; John Smith, Fay Spain.

Naked in the Sun (1083) (C): Melodrama; James Craig, Lita Milan.

The Big Beat (1084) (C): Mystery; William Reynolds, Andra Martin.

Going Steady (1085): Comedy-Drama; Molly Bee, Alan Reed, Jr.

Rawhide Trail (1086): Western; Rex Reason, Nancy Gates.

Across the Bridge (1087): Melodrama; Rod Steiger, David Knight.

The Spanish Affair (1088) (C): Melodrama; Richard Kiley, Carmen Sevilla.

Change in Regulations on Transfer to Fleet Reserve

If you're about to transfer to the Fleet Reserve, you'd better do some advance planning. Hereafter, you CANNOT transfer to the Fleet Reserve unless you have served aboard your present duty station for a full year.

If you apply for transfer to the Fleet Reserve after receiving permanent transfer orders you'll be required to carry out your orders, as your transfer to the Fleet Reserve will be deferred one year beyond your requested transfer date.

These changes — announced in BuPers Inst. 1813.3 — are designed to increase stability of personnel within the Navy and to reduce unnecessary costs of frequent transfers.

New Deadline Set for Connecticut Korean Bonus

During a special session of the Connecticut State Legislature, a bill was passed that extends the time for filing Korean Bonus Applications until 30 Sep 1958.

The bonus is paid to all qualified Connecticut veterans who served on active duty between 27 Jun 1950 and 27 Oct 1953 for a period of 90 days or more, and whose service was honorable or under honorable conditions.

Each veteran is compensated for his service in the amount of 10 dollars for each month or major part thereof active service in the armed forces. The maximum amount payable is \$300.

Applications and further information may be obtained from the Office of the Treasurer, Veterans Bonus Division, 33 Webster St., Hartford, Conn.

QUIZ AWEIGH

Since USS Macon (CA 132) is featured in this month's *All Hands*, we'll toss a few questions about that heavy cruiser in your direction.

1. CA132 is the second ship in the U.S. Navy to be named after the city of Macon, Georgia. The first was (a) an airship (b) an armored cruiser (c) battleship.



2. Macon is one of 14 heavy cruisers of the Baltimore class. Her displacement is 17,000 tons and her length is (a) 625 feet (b) 650 feet (c) 675 feet.

3. Regulus guided missiles provide Macon's long-range offensive punch while these rapid-firing three-inch 50 caliber twin mounts are her main source of air defense. In addition to



Regulus and the twin three-inch mounts, Macon's armament includes (a) eight-inch guns and Terrier missiles (b) five- and eight-inch guns, and 20mm and 40mm AA guns (c) five- and eight-inch guns only.

4. A 3-inch 50 caliber cartridge weighs 25 pounds. It is capable of firing a 13-pound projectile a distance of at least (a) five miles (b) 10 miles (c) 15 miles.



5. Here a Macon leadsman is about to take a sounding from his station which is called a (a) stage (b) chains (c) forward gangway.

6. Macon's maximum draft is (a) 22 feet (b) 26 feet (c) 30 feet.

If you answered all of this month's questions correctly you'll qualify as an honorary crew member of Macon. Answers can be found on page 61.

TABLE I

NUMBER WHO PASSED AND MAY BE ADVANCED TO EACH RATE AS THE RESULT OF THE FEBRUARY 1958 EXAMINATION

RATING	Na. who passed	No. who may advance	Na. who passed	Na. who may advance	Na. who passed	Na. who may advance	No. who passed	No. who may advance
	E-4		E-5		E-6		E-7	
AB	—	—	460	14	231	7	107	15
ABG	389	10	—	—	—	—	—	—
ABU	937	30	—	—	—	—	—	—
AC	—	—	310	310	98	60	73	73
ACR	16	16	—	—	—	—	—	—
ACT	115	115	—	—	—	—	—	—
ACW	97	97	—	—	—	—	—	—
AD	—	—	1457	300	1283	38	1367	44
ADJ	802	200	—	—	—	—	—	—
ADR	1280	600	—	—	—	—	—	—
AE	—	—	538	538	178	178	125	125
AEI	139	139	—	—	—	—	—	—
AEM	524	524	—	—	—	—	—	—
AG	158	158	132	132	87	87	36	36
AK	901	27	430	120	133	5	85	26
AM	—	—	920	920	347	200	338	200
AMH	475	475	—	—	—	—	—	—
AMS	629	629	—	—	—	—	—	—
AO	765	80	443	25	397	11	251	8
AQ	—	—	25	25	40	20	60	3
AQB	27	27	—	—	—	—	—	—
AQF	64	64	—	—	—	—	—	—
AT	—	—	978	978	334	334	187	187
ATN	321	321	—	—	—	—	—	—
ATR	267	267	—	—	—	—	—	—
ATS	24	24	—	—	—	—	—	—
BM	2071	62	1446	43	1432	42	972	51
BR	—	—	—	—	—	—	9	9
BT	1150	820	1044	1044	320	270	248	109
BU	238	180	160	160	62	62	34	34
CD	337	40	158	20	142	4	37	37
CE	94	94	67	67	29	29	14	14
CM	234	55	87	15	64	4	46	11
CS	1194	100	1104	33	1267	38	669	130
CT	346	346	506	506	143	143	149	30
DC	395	80	383	130	246	7	254	28
DK	302	200	152	152	120	5	93	4
DM	125	100	39	39	17	17	10	10
DT	446	70	278	100	161	6	111	4
EM	1070	1070	1090	1090	417	417	273	68
EN	1450	1200	920	400	701	21	645	300
ET	559	559	677	677	381	250	424	140
FP	563	180	382	250	163	20	105	17
FT	—	—	623	550	287	30	253	8
FTA	481	106	—	—	—	—	—	—
FTE	10	10	—	—	—	—	—	—
FTG	4	4	—	—	—	—	—	—
FTL	61	61	—	—	—	—	—	—
FTM	434	106	—	—	—	—	—	—
FTU	13	13	—	—	—	—	—	—
GF	71	71	17	17	21	2	39	5
GM	1410	200	906	50	852	25	500	28
GS	27	27	34	34	46	30	20	20
HM	2245	1000	1335	350	1040	31	939	29
IC	346	346	439	439	123	123	37	37
IM	36	5	47	10	19	2	17	2
JO	78	78	29	29	16	16	8	8
LI	128	10	50	2	44	2	18	1
MA	118	100	65	50	79	35	42	8
ME	431	200	436	100	307	20	261	53

It's That Time Again

THE RESULTS of the February exams are past history; most of the crows have been sewed on and many of your shipmates have choked on cigar smoke to help celebrate the occasion.

Generally speaking, the over-all number of advancements was high. It's true that some of the rating groups were more "open" than others and provided better opportunities to advance. But in the long run the only ones who really suffered (if that's the correct word) were those looking for the hard hat. And here, as in other rates, it must be realized that the number chosen was based on vacancies to be filled.

In Table I you'll find the actual number of Navymen, by rating and pay grade, who passed the examinations held in February and the number who were included in the quota for advancement to each rate on a service-wide basis.

You'll note that there were fewer advanced to E-7 than there were in other years. The answer is obvious. There just weren't as many vacancies to be filled. You can chalk up the whys and wherefores to three reasons: Not as many CPOs were transferred to the Fleet Reserve as in past years; not as many left active duty; and reductions in size of the Navy during the last two fiscal years. This latter reason resulted in slightly reduced requirements for men at all pay grade levels.

What about the future? What are your chances in the August exam?

In estimating the advancement opportunities for those taking the August examinations, tabulations are based upon past statistics in computing the number of men likely to pass, and upon the best data now available in calculating the number of vacancies to be filled in August.

It should be noted that although emergency service ratings and selective emergency service ratings are not listed, they have the same advancement opportunities as related general service ratings.

It stands to reason that the best chances for advancement lie in the rating groups in which the greatest Navywide shortages exist. Of those passing examinations in the following ratings and rates from 76 to 100 per cent may expect to be advanced:

What Are the Chances?

Pay Grade E-4: AC, AD, AE, AG, AM, AQ, AT, BT, CT, EM, EN, ET, GF, GS, IC, JO, MU, OM, QM, RD, RM, SK, SM, SO, TD, TE(RM), TM and UT.

Pay Grade E-5: AC, AE, AG, AM, AQ, AT, BT, CE, CT, DM, EM, ET, GF, GS, IC, JO, MM, MR, MU, OM, QM, RD, RM, SK, SM, SO, SV, TE(RM), TM and UT.

Pay Grade E-6: AC, AE, AM, AT, BR, BT, CE, CT, DM, EM, ET, IC, JO, MM, MR, PM, RD, RM, SM, SO, SV, TE(RM) and UT.

Opportunities for the following rates are good. And you can expect that from 51-75 per cent of those passing the exams will be advanced.

Pay Grade E-4: DC, DK, DM, MA, MM, MR, PM and YN.

Pay Grade E-5: BU, DK, EN, FT, MA, PH, PM, PN, SW, TD, TE(YN) and YN.

Pay Grade E-6: AG, GS, MU and OM.

You can put your chances down as fair (extra study will help) if you're going up for one of the following rates. Of these, it is expected that between 11-50 per cent of those passing will be advanced.

Pay Grade E-4: AK, AO, BM, BU, CD, CE, CM, DT, FP, FT, GM, HM, IM, LI, ME, ML, PH, PN, PR, SV and SW.

Pay Grade E-5: AB, AD, AK, AO, CD, CM, DC, DT, FP, GM, HM, IM, ME, ML, MN and PR.

Pay Grade E-6: AK, AQ, BU, DK, FP, FT, GF, MA, PH, PR, SK, SV and TD.

There is an excess of personnel in certain rates. While none of them is closed, only 3-10 per cent of those passing the exams for the following rates will be advanced:

Pay Grade E-4: AB, CS, MN, SD and SH.

Pay Grade E-5: BM, CS, LI, SD and SH.

Pay Grade E-6: AB, AD, AO, BM, CD, CM, CS, DC, DT, GM, HM, IM, LI, ME, ML, MN, PN, QM, SD, SH, TE(YN), TM and YN.

In reading this over you will note that no predictions are given for the newly-established ratings of NW and PT. This is due to the lack of adequate statistics.

This rundown gives you a fairly good idea of what the future holds. You can, for example, take a long hard look at your own crystal ball

TABLE I (continued)

NUMBER WHO PASSED AND MAY BE ADVANCED TO EACH RATE AS THE RESULT OF THE FEBRUARY 1958 EXAMINATION

RATING	No. who passed	No. who moy advance	No. who passed	No. who moy advance	No. who passed	No. who moy advance	No. who passed	No. who moy advance
	E-4		E-5		E-6		E-7	
ML	44	6	26	4	17	2	10	1
MM	1328	1328	1125	1125	501	501	368	300
MN	106	4	99	20	53	2	31	6
MR	347	230	233	233	94	94	45	45
MU	121	121	97	97	62	40	30	30
NW	47	47	26	26	56	56	46	46
OM	18	18	19	19	7	3	11	1
PH	—	—	188	150	96	4	95	3
PHA	126	25	—	—	—	—	—	—
PHG	371	125	—	—	—	—	—	—
PM	28	14	19	19	4	4	3	1
PN	1495	400	417	300	251	13	124	5
PR	212	80	120	100	52	5	55	20
QM	274	274	159	159	89	5	225	8
RD	675	675	565	565	247	247	109	109
RM	978	978	816	816	246	246	254	254
SD	1481	44	981	29	800	24	462	100
SH	1188	100	577	15	226	7	217	130
SK	1054	850	705	600	434	15	290	9
SM	259	259	212	212	88	88	156	156
SO	322	290	363	363	138	138	100	100
SV	69	40	18	18	6	6	2	2
SW	57	15	61	35	32	2	16	13
TD	—	—	141	110	84	18	51	17
TDI	67	67	—	—	—	—	—	—
TDR	42	42	—	—	—	—	—	—
TE(RM)	35	35	105	105	79	79	68	68
TE(YN)	—	—	55	44	27	1	25	1
TM	178	178	147	147	225	7	183	6
UT	65	65	46	46	24	24	15	15
YN	1669	1500	993	700	600	30	482	21

and tell whether or not your own rating group is getting crowded.

If you find yourself getting elbowed aside, take time out to read BuPers Inst. 1440.18A and 1440.5B. You'll see that they establish a broad program to help balance the enlisted rating structure by allowing you to move out of a crowded rating group into one with better opportunities.

And you can expect that if you are competent and take advantage of this change in rating program, it will improve your advancement opportunities in the next few years.

New Course Offered in Communication Engineering

About 30 unrestricted line officers (1100 and 1300) will enter the new Communication Engineering course at the Postgraduate School in Monterey this August.

This postgraduate course is de-

signed to enable officers who are highly qualified in operations to comprehend the theoretical aspects of the evergrowing information exchange problems of the Navy and to assist in their solution. The course will provide students with a strong background in communication theory, information exchange and electronics.

The two-year course leads to a Bachelor of Science degree in Communication Engineering, and helps meet the increasing requirement for electronics knowledge for new weapons and information systems in the Fleet. Successful completion will add to general line qualifications of career officers interested in weapons systems, information exchange and Navy planning.

Application for the class entering in 1959 may be submitted in accordance with the forthcoming BuPers Postgraduate Notice.

Hankering for Cool Weather? Adak, Alaska, Is Your Dish

RESIGNATION on your part and commiseration (not to mention a secret sense of superiority) from your friends is the typical reaction when you get orders for Adak, Alaska. Let's face it: Adak is no paradise flowing with milk and honey but, on the other hand, it isn't nearly so grim as your startled imagination might picture it. After all, people have been living there for years.

To help protect yourself during going-away parties, here's the story

on living conditions aboard the Navy's Aleutian outpost, as told to ALL HANDS through the courtesy of Adak Naval Station. We can't vouch for the facts personally, as Adak is a little off our beat.

Adak, on which the Naval Station is located, is an island of the Andreanof Group, located in the southernmost part of the Aleutian Chain. The country is rugged and mountainous, and although the island is covered with grass, it has no trees. There is

neither a native population nor a civilian settlement or village on the island.

It has an average winter temperature of 32°F. The summer months of June, July and August are relatively mild, with the average temperature at about 44°F. The thermometer rarely climbs into the 70s. We suggest this would be a good season to write your friends in Guantanamo Bay and Panama.

The average rainfall is some 44 inches per year—which our correspondent assures us is less than some states—and there are long wet spells. During the winter, snow and sleet flurries occur almost daily, although heavy snows are rare at the base. The mountains are covered with snow about eight months of the year.

The most disturbing part of Adak weather is the high wind. Gusts occasionally reach 80 knots and, during the winter, winds of hurricane strength have been recorded. Though these winds may sound extreme, they affect station life very little.

There are about 125 miles of roads on Adak. Most of them are not paved, but they are in fair to good condition. Buses cover all major parts of the station and run on schedule.

Autos—If you have a family you need an automobile and, under any circumstance, a car is highly desirable. No matter what your status, you are encouraged to bring your car, as other forms of transportation are limited. Climate and roads being what they are, choose one that has a minimum of chrome and gingerbread and that is in good mechanical condition. Repair and maintenance facilities are limited and if you can't get parts through normal mail order sources, you're going to walk. Snow or heavy duty tires are recommended, and it is also advisable to have your car undercoated before it is shipped. Try to see that it is as waterproof as possible because it is going to sit out in the weather the year round.

Regular gasoline now costs about 25 cents per gallon.

Your car may be shipped from Seattle to Adak via MSTs free of charge, but you must make sure

WAY BACK WHEN

Coaling Ship

Back in the old days coaling ship was regarded as a drill, but crew members undoubtedly had other words to describe it. However, because coaling was an absolute necessity, especially in time of war, every effort was made to increase the efficiency of the crew in time of peace.

The stations and the duties, different for each ship, were clearly laid down in the coaling bill. As a general rule, each division worked its own part of the ship by setting up coaling screens, rigging canvas over the side, and getting up baskets and shovels and rigging booms and guys. The duties of the engineers usually consisted of rigging portable chutes below, and handling the coal once it was in the chute.

In this drill, no one was excused. It was written in most bills that "No officer or man can leave the ship, except on duty, during coaling."

Each division on the ship was out to make a new record for itself at coaling. Everything depended on the method the ship adopted. Men were stationed on the decks and in the lighters. Petty officers were stationed at strategic points to supervise, direct and expedite the work. And if the occasion was called for, they could show members of the crew how it should be done.

When you're out to set a record, there are many details to watch. Coaling ship was no exception. Special attention was centered on the holding bags, hooking on, hoisting, landing bags on deck or on trucks, unhooking, overhauling hooks, handling empty bags on deck and handling empty bags in lighters.

It was recognized that everything was bound to get dirty. However, if paint was worn off by the foul lead of a whip, or by the dragging of a bag over the rail, the division lost points. It was up to every man in the division to keep the ship in good condition during the operation.

Baskets, bags or buckets were used to get the coal aboard. The preparations by the various divisions meant that they had to provide hawsers fore-and-aft, bend on heaving lines, and have hawsers ready to be passed when coal barges or colliers came alongside. It also meant they had to clear away life lines, hinge down stanchions, rig in lower booms. They had to close and batten down hatches. They had to provide coal bags, shovels, grapple, coaling screens, whips, coaling trucks, backstays and guys for coaling booms. They had to provide cane fenders and, if it was necessary, trice up ladders and hinge them over to the rail and lash them down. They had to take off all scuttle plates and, again, if it became necessary, they had to unship gangways.

After finishing the coaling job, the deck gang had to bathe, then scrub clothes and canvas gear, boat covers and hatch covers; then scrub paint work and decks and clean the boats and all gear. Below decks, the black gang had their hands full, too.

These were "The good days of the old Navy."



that, if you have a lien on the car, you have written permission of the holder of the lien to ship it out of the country. Request authorization from the CO, Adak, for shipment.

Transportation—You and your family may travel to and from Adak by government air or sea transportation at no expense to you. Dependent travel is authorized by the Commandant, 17th Naval District, when government quarters are available. Concurrent travel is rare because of the limited number of government quarters and absence of other accommodations for dependents on Adak.

The Commandant, 13th Naval District, will decide the method of transportation once your family's entry has been approved. Quarters for dependents of enlisted personnel and of officers in pay grade O-3 and below are available for the three to four days required for processing. A small charge is made for subsistence while in transit.

Authority for dependents to enter via commercial means must be obtained from the Commandant, 17th Naval District. This authority will be granted only if government quarters are available. Commercial sea transportation consists of approximately one vessel per month which has a capacity of about 15 cabin class passengers. Commercial air transportation is available through Anchorage.

Housing—Married officers and married enlisted personnel of pay grades E-6 and E-7, and E-5 with eight years' or more active federal service, are eligible for government quarters. Waiting periods vary from three to eight months. Two- and three-bedroom family units are available. Three-bedroom units are intended primarily for families with three or more children. Temporary quarters are available until you move into permanent quarters.

You'll find these items of furniture in your government quarters:

Living Room: One divan, two end tables, two lamps with shades for end tables, two upholstered chairs (lounge type), two occasional chairs, one to three floor lamps with shades, coffee table, bookcase in some quarters, writing table or desk, rug with pad, and large mirror. A vacuum cleaner is shared.

Dining Room: A gateleg table (dropleaf) or a dining table equipped with extension leaves, six to eight

All-Navy Cartoon Contest
William R. Maul, CT2, USN



"Yes, sir, I know my record says I can type 60 words a minute, but you see, only about 13 of them make sense."

dining chairs, one built-in china cabinet or buffet, and one rug with pad or a dinette set.

Dinette: One dinette table and four chairs.

Hall: One telephone shelf and telephone, and rug with pad.

Bedrooms: One double bedframe with spring and mattress or twin beds with springs and mattresses, chair, chest of drawers, night stand, lamp with shade, vanity in master bedroom, large mirror, and rug with pad.

Laundry: One washer and dryer.

Household Goods—Because of the lack of storage space, it is not possible to furnish storage for either government-owned or personal furniture, goods, or appliances, except in the quarters themselves.

All items you bring must be stored in your own quarters, and no government furniture allocated to those quarters may be removed. Most families consider that there is not enough room for both a deep freeze unit (preferably upright model) and an automatic ironer, although some find room for one or the other (usually in a bedroom). Couples without children can plan on having some extra space in the "spare" bedroom.

It is generally agreed that room can be found for one or more of the following items: Sewing machine, vacuum cleaner, record player, tape

recorder. All these items, except sewing machines, are stocked at the Navy Exchange. Bring along sleds for children. The surfaced areas, other than thoroughfares, are limited, a factor which should be considered in deciding whether or not to bring tricycles, bicycles and similar items. Personal furniture and appliances which are similar to government furnished items, and other items for which you will not have room should be placed in storage in the United States. Such storage is furnished at government expense. A limited quantity of china, kitchen utensils and bedding is available until your own arrives. Bring:

Table	Silver	Kitchen utensils
Curtains		Pictures
Linens		Drapes
Ironing board		Blankets
Waste-baskets		Radio (regular
Table chinaware		broadcasts and/or
TV set		short-wave)
Small kitchen appliances		Pillows

When you receive orders for duty at Adak, you will have to decide whether the family will plan to make their home there, or will remain in the United States during your tour of duty. If you decide that the family will eventually make their home at Adak, you will then have to make another decision as to whether or not an intermediate move will be necessary during the period while you are awaiting authorization for the family to travel to Adak. If an intermediate move is necessary, it may be made at government expense.

You should contact the Household Goods Section of the nearest supply activity for information regarding transportation of dependents and the shipment and storage of personal effects and household goods. Ask for Bureau of Supplies and Accounts Publication 260, entitled "Household Goods Shipment Information." The Household Goods Section will be glad to give you the latest information regarding entitlement and such other advice and suggestions as you may desire.

Household goods are normally shipped through the Naval Supply Depot, Seattle. Authorization from the Commanding Officer, Naval Station, Adak, is required.

When permission has been received, the nearest Household Goods Section should again be contacted for the latest information regarding

ANSWERS TO QUIZ AWEIGH

1. (a) An airship.
2. (c) 675 feet.
3. (c) Five- and eight-inch guns only.
4. (a) Five miles.
5. (b) Chains.
6. (b) 26 feet.

*Quiz Aweigh is on page 57.

movement of your goods to Adak and/or to non-temporary storage. In general, three separate shipments are authorized:

Express shipment (not to exceed 500 pounds total), including the things needed upon your arrival—essential household goods and seasonal clothing.

Freight shipment to non-temporary storage including furniture and items not required.

Freight shipment to Adak, in which you should include the balance of small appliances, extra clothing, and household goods.

The shipments destined for Adak, particularly the express shipment, should be made available to the packers as soon as possible after you receive authorization to travel so that they will arrive at Adak at the earliest possible date.

In addition to these shipments, dependents traveling by ship from Seattle to Adak are allowed 350 pounds of hold baggage for each person over 12, and 175 pounds for each child under 12. This must be in a foot locker or otherwise crated or packed, and is not available to you during the trip, but will arrive at Adak with you.

Personal Clothing—Adak is not a perennial ice box. Your present clothes, with a few additions, should prove adequate. Emphasis should be on water- and wind-repellent fall-weight clothing, because the summer is comparatively cool and the winters only moderately cold. A warm overcoat or parka is a must, as are heavy-soled shoes, raincoat, galoshes and headgear. Heavy clothing is not needed for daily routine living, but outdoor activity makes it advisable to bring woolen suits, sweaters, heavy socks, and warm gloves. For the children, ski suits and parkas are ideal, and extra mittens are advisable. Bring summer clothes, slacks, pedal pushers, swimming suits, and hats. Evening gowns and dinner jackets are desirable for occasional formal parties.

The local shopping center is limited to a Navy Exchange and, therefore, many sundries and notions cannot be bought locally. Limited stocks of clothing are available, however, and a women's and children's ready-to-wear section has recently been established. Ranges of styles and sizes of shoes are quite limited. Al-



"But Boats . . . There's no such thing as medal fatigue!"

though yard goods are stocked, zippers, buttons, thread and other notions are sometimes not available in matching colors. It would be wise to bring a good supply of these items in neutral and commonly used colors if you plan to sew.

Mail Order Service—Mail order service from the Washington-Oregon area is available and widely used. Shipping time by this service approximates four to six weeks.

School—Schooling extends from kindergarten through the 12th grade. Diplomas issued from the high school are acceptable in any state institution of higher learning in the continental United States. Courses not offered by the high school are furnished by correspondence from the University of Nebraska, Extension Division.

The quality of instruction in both the elementary and the high school, especially for juniors and seniors is limited, as there are only three teachers for the four high school grades.

The school building is new, and is located near the housing area. Transportation is furnished. Territorial law requires that a child be five years old before 1 November of the school year to enter kindergarten any time during that school year. To enter the first grade the child must be six before 1 November to enter during that school year.

Churches—There are both Protestant and Catholic chaplains on Adak and religious services are held regularly. Complete programs of religious education are offered.

Recreation—Recreational facilities at Adak are widespread and varied. Special Services has athletic gear available for issue for basketball, softball, badminton, boxing, wres-

ting, track, skiing, skeet, riflery, horseshoes, and bowling. For year-round swimming, an indoor swimming pool is located in the Bering Recreation Building. The Fletcher Library boasts more than 14,000 volumes with a wide distribution of subject matter, as well as current popular magazines. The Bering Theater offers a matinee on Saturday and Sunday and two shows nightly. There are also an indoor rifle range and a skeet range.

There are several clubs: the Officers' Club, Hammerhead Lodge; and Air Force Enlisted Men's Club, The Airmen's Club; the CPO Club; a Civilian Employees' Club; a Marine Enlisted Men's Club; and a Navy Enlisted Men's Club, the Club Bayview.

There are two package stores: one operated by the Navy Exchange, and one by the Hammerhead Lodge.

A popular recreational activity on Adak is the Hobby Shop. There are automobile repair, photographic, leathercraft and carpentry sections. Model-making and lapidary work are also done there.

Hunting and Fishing—Other than for ptarmigan and a few geese and ducks, there is very little hunting on Adak. Fishing is fair to good in the area, with salmon and trout fishing very popular. Recreational leave may be taken to the mainland of Alaska with its abundant hunting and fishing facilities.

Radio and Television—Adak has an Armed Forces Radio and Television outlet which broadcasts not only important local announcements and events, but also many of your favorite stateside radio and television programs. In addition, many stateside programs may be received on short-wave radio.

Pets—It is strongly recommended that pets NOT be brought. All cats and dogs must have shots and must be registered with the Security Officer. Dogs must be leashed except when in private quarters.

Medical Care—Medical facilities are available to military and dependent personnel on Adak. For dependents there is a maternity clinic and general medical clinic, but laboratory tests and drugs are limited. Dependents under special medical care are advised that there are no specialists on Adak. Dependents having optical difficulties are advised

to equip themselves with glasses and to make arrangements for replacement before leaving. Emergency medical care is available.

Dental Care—Necessary dental work is performed by appointment for military personnel. Dental treatment is also available for military dependents, but on a deferred priority basis.

U. S. Mail Service—Adak has a Navy Post Office which provides all services available in any U. S. Post Office except Postal Savings and C. O. D. service. First Class and Air Mail arrives on the island at least weekly; newspapers, magazines, and Parcel Post packages are received once or twice a month by ship.

Navy Exchange—The Navy Exchange operates a retail store, a commissary which is well-stocked, a tailor shop, cobbler shop, various snack bars, barber shop, beauty shop, laundry, dry cleaning plant, garage, and service station. The Exchange also offers radio, television, and watch repair service and limited veterinarian service.

Retirement Planning Guide Now Being Distribution

To assist you in your pre-retirement planning, the Bureau of Naval Personnel has prepared a booklet entitled *Your New Career* (NavPers 15895-A) which is being distributed to all ships and stations.

This 64-page guide deals with financial planning for added retirement security, your health and retirement activities, and job procurement.

For those who plan to seek full or part-time employment, there's a lengthy section on civilian relationships of service-acquired skills, knowledge and experiences to business requirements; and how to go about getting a civilian job.

Your New Career is being sent to all ships and stations for use in libraries, I and E offices, and other locations.

In addition to this new pre-retirement planning guide, the Bureau publishes a *Navy Guide for Retired and Fleet Reserve Personnel* (NavPers 15891). A copy of this 64-page booklet—which covers the rights and benefits of a retired Navyman and his dependents—is forwarded to each individual with his retirement or transfer to Fleet Reserve.

HOW DID IT START

Chronometer

Up until the 18th century the "tools" of the navigator's trade were limited to those which could be used for finding the latitude of a ship at sea. To find his longitude a skipper had to rely on dead reckoning, in which he approximated his east-west position by estimating the run of the ship. Because a sailing ship's run was largely dictated by the vagaries of the wind, accuracy was hard to come by.

As early as 1530 the Flemish astronomer, Gemma Frisius, had pointed out the possibility of determining longitude at sea by using a timekeeper, but the mechanical difficulties involved in building an instrument to keep the exact time at sea appeared insurmountable. The watches of that period, called "Nuremberg eggs," weren't accurate enough. Pendulum clocks were too much affected by the roll of a ship, as Christiaan Huygens, a Dutch scientist, found out when he tackled the problem.

Between 1662 and 1670 he constructed several marine timepieces, controlled by pendulums, and subjected them to actual tests at sea. As a result, he discovered that not only the ship's motion, but also the effects of changes in temperature would have to be overcome. Many other inventors also ran into trouble. Still, they kept on trying, for an accurate seagoing timepiece could make finding correct longitude practically a breeze. What was needed was a device that could measure time with accuracy of a fine scientific instrument.

With such a device it would be possible for the ship to carry Greenwich time along wherever it sailed. Then, the navigator could find his longitude simply by comparing the sun time where his ship was to the Greenwich time carried on the "clock." For instance, if the timepiece showed one o'clock when the sun over the ship was in its noon position, this would mean the ship was as far west of Greenwich as the sun "traveled" (or more correctly, the earth turned) in one hour. Thus, since the earth turns 360 degrees in 24 hours, or 15 degrees per hour, the navigator would know he was 15 degrees west of the meridian at Greenwich.

In 1713 a number of British shipowners interested in this problem got together and demanded that their government offer a prize to the person who discovered a good method of determining longitude at sea. The government responded the following year by offering a cash reward of 20,000 pounds sterling, which would be a considerable sum even today. The money was to be distributed by a Board of Longitude.

The development of the sextant in the early 1730s made it possible to determine Greenwich time from the changing position

of the moon among the fixed stars. However, this so-called method of lunar distances was too complicated for practical use and the search went on.

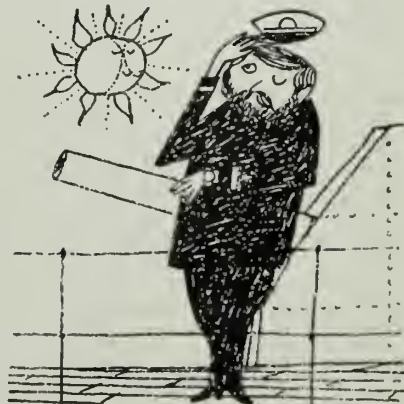
Meanwhile, in 1728 a young clock-maker named John Harrison had come to London and made up his mind to win the 20,000 pounds. The Board of Longitude, which favored the lunar distances method in spite of its complexity, would have nothing to do with him, but Harrison tackled the problem anyway.

By 1735 his first chronometer (literally "time" meter) was ready. The Admiralty, over the opposition of the Longitude Board, agreed to let him test it aboard HMS Centurion. It worked, meeting the stringent requirements for accuracy—but Harrison wasn't given the 20,000 pounds.

Still determined, Harrison went back to work, devoting almost 40 years to the effort to build a finer timekeeper. He turned out model after model, each better than the one before it, until eventually he even had one small enough to be carried in a coat pocket. His time-measuring machines made repeated voyages across the ocean, keeping correct time no matter where they went—yet he got only part of the prize.

Finally, about 1772 or '73 the board paid off the full amount when the king gave orders that Harrison was to be given all the money he had coming to him. By then the "young" clock-maker was over 80 years old and the French inventor, Pierre Le Roy, had produced a chronometer more on the order of those in use today. Others soon followed. But, Harrison is usually given credit for inventing the first successful chronometer and for making modern methods of astronomical navigation possible.

Nowadays, although chronometers date far back into yesterday, the Navy still carries them on such ships-of-tomorrow as the latest CVAs, nuclear submarines and guided missile cruisers.



TAFFRAIL TALK

We visited *uss MACON* (CA 132)—practically the entire ALL HANDS staff, that is. Our impressions of that fine ship are given in these pages. Lovingly known to some of her crew as "Building 132," and sporting many slogans such as "The Macon Way," she is a smart ship, with a fine crew. In a sense, she's typical of the U. S. Navy fighting ship.

We've lived in a lot of ships, both in our past service, and during our field trips. We have a soft spot in our hearts for the ships we've served in, and for those that we've cruised in. We wish we could visit *your* ship or station too—and maybe we can. Meanwhile, please join us and give credit to a great ship of a powerful Navy—*uss Macon*. We were proud of that ship and that crew. You can be proud of them, too—for they are your shipmates in this Navy.

As you have seen, she feeds well, pays regularly, and visits interesting places. And—at times, people visit her. One young



lady, for example, trying to find her way around, mentioned that she wanted directions to find "the pointy end of the ship." In case *you* don't know, just look at our centerspread illustration.

★ ★ ★

Here's more proof—if you're looking for it—that a Navy career can be a broadening experience. We are indebted to *Destroyerman*, the DesLant Info Bulletin, for telling us about Robert H. Lance, EN3, and Irvin W. Moore, EN3, who have lined up quite a record for themselves. They have crossed the Equator, the International Date Line and the Antarctic Circle in one ship. Back in the States, they received a transfer to another ship in which they crossed the Greenwich meridian and the Arctic Circle.

Destroyerman thus claims for Lance and Moore the record of crossing every major geographical line in the world and adds for good measure that they have also crossed the Mason-Dixon Line.

Nice going, *Destroyerman*. Of such stuff is mortal journalism made. But one query. Have they never crossed a chow line or pay line?

★ ★ ★

We are frequently embarrassed by what we like to call typographical errors. However, we're happy to see that we're not the only ones who are plagued by typewriter gremlins. The CO of *uss Salmon* (SSR 573) refused to sign his Supply Officer's monthly Report of Provisions because it was addressed to: Commanding Officer; Navy Subsistence Office; U. S. Naval BUN Factory; Washington 25, D. C.

Looks to us like a slight confusion of cognizance.

The All Hands Staff

The United States Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

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• AT RIGHT: GOING CONCERN:—
Talker to bridge D. Reynolds, YN3, verifies speed changes on throttle board as LT F. W. Corley, Jr., main propulsion assistant of USS Macon, stands by.



**ONE OF THE
CHIEF REASONS**



**GOOD MEN MAKE
a strong Fleet
a strong Navy**

ALL HANDS

THE JOURNAL OF NAVAL TEACHING AND INFORMATION MATERIAL



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for 10 readers. All should
see it as soon as possible.
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DECEMBER 1958



ALL HANDS

THE BUREAU OF NAVAL PERSONNEL INFORMATION BULLETIN

DECEMBER 1958 Nav-Pers-O NUMBER 503

VICE ADMIRAL H. P. SMITH, USN

The Chief of Naval Personnel

REAR ADMIRAL J. R. LEE, USN

The Deputy Chief of Naval Personnel

CAPTAIN O. D. FINNIGAN, Jr., USN

Assistant Chief for Morale Services

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CDR F. C. Huntley, USNR, Editor

John A. Oudine, Managing Editor

Associate Editors

G. Vern Blasdell, News

David Rosenberg, Art

Elsa Arthur, Research

French Crawford Smith, Reserve

Don Addor, Layout

• FRONT COVER: IN THE MED—Crew members of Sixth Fleet Flagship's barge stand ready as they prepare to come alongside ship anchored in Augusta Bay, Sicily.

• AT LEFT: DISTINGUISHED VISITOR—Not only do men who join the Navy see the world, but they often meet world-famous people. So it was with Navymen on board USS Randolph (CVA 15) when they had the honor of welcoming aboard the "former naval person," Sir Winston Churchill.

• CREDITS: All photographs published in ALL HANDS are official Department of Defense photos unless otherwise designated.

DUTY WITH DESRON

THERE ARE ONLY eight ships in the entire Navy that have painted on their superstructure a big gold figure "8" with four gold stars on either side. The word DESRON is above the numeral; the word EIGHT, beneath. All are set on a field of blue. These are the ships of Destroyer Squadron Eight. And these eight ships come under the leadership of CAPT A. B. Cox, Jr., USN, who is Commander, Destroyer Squadron Eight.

Like any other destroyer squadron commander, CAPT Cox is re-

cord book, but really operate. They operate day in and day out, in fair weather and foul, in good health and bad.

THERE'S MORE to it than meets the eye. Staff engineering must know which ships are undergoing an overhaul and which are ready to move. And long before they do move, there's many an hour spent in the tedious and painstaking process of working out operation orders. Then more time is consumed by the staff

modore a better insight into the workings of his destroyer captains—which is ever important in times of emergency—the main undercurrent of every operation order involves training for the crews.

What happens if the ships arrive in the operating area, with the sky overcast and no plane shows up to tow a sleeve? This detail too, is thought of in advance and taken care of in the operation order. In many cases, one of the destroyers would fire a starshell to provide a



sponsible for the discipline, administration and training of some 2500 officers and men.

Contrary to the alleged belief of a large part of the rest of the Navy, the working schedule of destroyermen is not confined exclusively to pleasure cruises. Each morning, as ships of DESRON EIGHT steam out of Newport, CAPT Cox and his staff have concocted as fiendish a plot as any that has ever been devised. Over a period of time they will have placed the ships and men of Eight in every perilous and hazardous situation that has happened as far back as the memory of destroyermen can reach.

However, in this equivalent of a nautical soap opera the protagonists usually survive—muscles are aching and egos shattered—but they survive. This process is known by the pleasant euphemism "training."

To perform the function for which they were intended in time of crisis, these ships must operate—not just pile up mileage for the

yeoman in cutting stencils, running them off and seeing that these operation orders are distributed to the ships involved.

When riding the flagship, the staff assumes the responsibility of all communications. The night before an operation all circuits that are going to be used are checked by the chief radioman. He does this again two hours before getting underway. This gives him plenty of time to replace any weak and worn-out tubes and at the same time, go over operating procedures with the radio gang.

Up in the pilot house the operations officer works out courses to be steered. These and the exercises to be conducted are reviewed with the squadron commander.

The day's exercise might involve many ships or only two ships in the squadron, organized to provide background information for non-naval War College students. But it becomes more than just an indoctrination cruise. Besides giving the com-

target for the other ship's guns. A highline transfer or a practice refueling at sea could be substituted for one of the exercises. There is always the constant need for training to bring a crew to peak efficiency for the one day it will be needed.

The exercise could be on a much bigger scale, taking in all of the ships in the squadron and, on occasions, many more—depending upon the situation and the seniority of the squadron commander. This situation could come about while operating in the Mediterranean with the Sixth Fleet or, as it happened so many times, in actual combat during World War II.

You could say—and be quite correct in saying—that a squadron commander is a man of many decisions. These range anywhere from deciding which ship in the squadron will assume the ready duty to which one will enter port first. The proper instant that a turn must be executed is his decision. That could mean the difference between destroying, or

EIGHT

being destroyed by, an enemy.

There are other decisions, of course. Which ship is to act as plane guard while operating with an aircraft carrier? Which ship is to chase down a sonar contact? Which ships are lowest on fuel and which of them should refuel first?

THE NECESSITY for a squadron commander to make a decision can pop up at any time during any given 24-hour day. It could come about during a night shore bombardment when one ship must be pulled out of line because one of its mounts is not working; substituting another destroyer in its place and covering the spot just vacated. And all the time, directing fire wherever and whenever the shore fire-control party calls for it.

These are the times when training pays off. Not just the formal training, but the little bits and snatches of information that have been picked up and stored away in the back of the commodore's mind of how one ship reacted to a command during an administrative inspection—how quickly another responded to a turn signal—which crew took pride in its ship and in its shooting. One by one these and many other thoughts tumble and churn through the mind of a destroyer squadron commander. To put these decisions on the line, he can act on his own or draw on the capabilities of the officers on his staff.

The officers in COMDESRON EIGHT's staff include the operations and gunnery officer, communications and electronics officer, engineering and material officer, a medical officer and a chaplain. Rounding out the enlisted portion is an allowance of seven billets: RMC, SM1, YN1, RM3, YN3, SD1 and a TN.

Whenever this group (better known as the "flag") moves aboard ship, they take all records and personal gear with them. Usually, working space is provided and berthing is arranged ahead of time.

One chief yeoman, a former destroyer squadron flag member, brought back to mind how members of each ship's company regarded all personnel in the flag as "furriners."

"As yeomen, we had to fight for every little bit of space allotted in the ship's office. And it was strange



SALTY SCHOOL—When ships of destroyer squadrons steam to sea they tackle training problems to keep them ready for any emergency that might arise.

how many times they would hold 'extra' field days and somehow or other, the little space allocated to us became just the place they needed—temporarily, of course.

"But, one by one, these difficulties had a way of straightening themselves out, and sooner or later, the flag and ship's company would become one."

WHENEVER THE WORD gets out that a ship in the Eighth (or any other) squadron is scheduled

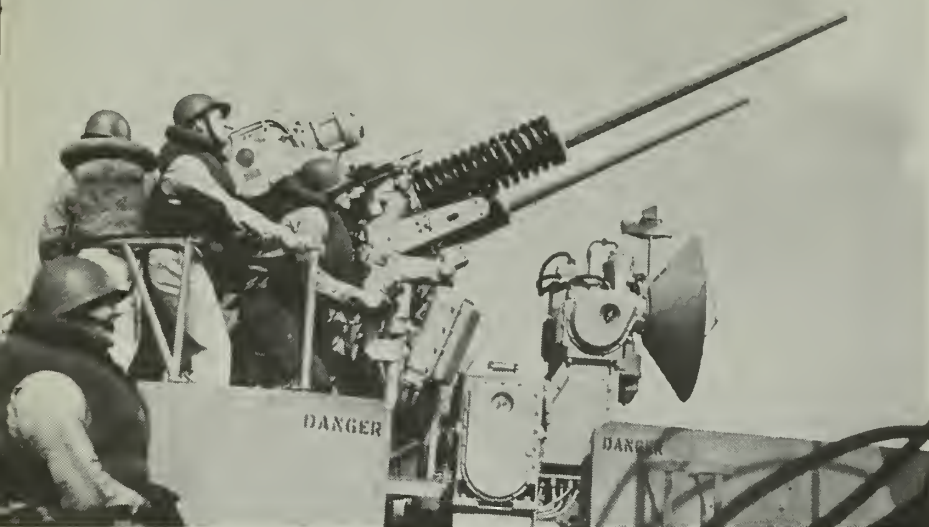
to receive its administrative inspection, there's a scurry and a rumble throughout the hull.

There are uniforms to be cleaned and pressed, haircuts to be had, records to be brought up-to-date, wire brushes and paint brushes to be wielded and those last-minute details worked out until, at last, the officers and crew are standing in perfect rows in dazzling uniforms as the word is passed, "DESRON EIGHT, arriving."

Then follows a day-long inspec-

SPIC AND SPAN—Destroyermen of Squadron Eight stand formation topside for change-of-command and get the word from their new squadron leader.





BOOMING BUSINESS—Gunners on an Atlantic Fleet destroyer man rapid-fire twin 3-inch gun mount during antiaircraft firing practice on the high seas.

tion which starts as soon as CAPT Coxe steps aboard. He is the Chief Inspector. His assistant is a commanding officer from one of the other ships in the squadron who is responsible for instructing the inspecting party in their duties.

First to be inspected is the full guard. This is followed by an inspection of the executive officer and heads of department who are also introduced to the chief inspector by the commanding officer.

Then comes personnel inspection of the crew. Someone has already given that last cursory glance, checking up and down the formation to

make sure that white hats are white, that nothing sticks out of pockets and that the top of square knots in neckerchiefs are even with the bottom of the jumper's "V." You'd hardly recognize some of your own shipmates during these inspections, so stern is the look on their faces.

Breathing starts once the party passes—but even this is for only a brief moment. It's time for those men responsible for standing by their working spaces to take their positions during the topside and lower deck inspection and be ready to answer any questions they might be asked of their department.

WEATHER OR NOT—Destroyer squadrons sail out to sea to operate in all weather. Foul weather practice readies crew to function under all conditions.



A CRITIQUE follows. This is the time when each assistant inspector talks about the department he inspected and brings out items of special merit, major discrepancies and a recommended work mark. Very little is left to the imagination as to which person or what department failed to measure up to standard. The recommended work marks are added up (or subtracted) and, some time during the year, are compiled with other marks to decide which ship in the squadron wins the coveted Battle Efficiency "E."

Most of these other marks are based on the Operational Readiness Inspection which is carried out under the direction of the Squadron Commander. While inspectors assume vantage points throughout the ship, the crew goes to General Quarters to work out a battle problem. The battle problem consists of simulated target hits and of how these "hits" are controlled by the damage control party. It also takes in the care and handling of "wounded," the way the ship is handled and, all in all, the way the crew reacts to all problems presented by the inspecting party.

The Squadron "E" was awarded last year to *uss William R. Rush* (DDR 714) with *Charles R. Ware* (DD 865) the runner-up.

The ships in the squadron are broken down into two divisions—Destroyer Division 81 and Destroyer Division 82. Those in DESDIV 81 include the flagship, *uss Decatur* (DD 936), *Joseph P. Kennedy, Jr.* (DD 850), *Charles R. Ware* (DD 865) and *Perry* (DD 844).

Destroyer Division 82's flagship is *uss Fiske* (DDR 842). Other ships in the division are *William R. Rush* (DDR 714) *Myles C. Fox* (DDR 829) and *Hawkins* (DDR 873).

All of these ships, at one time or another, go into a naval shipyard to have their nuts and bolts tightened. About three months earlier, a Board of Inspection and Survey holds a material inspection to see just what jobs need to be done and assigns them on a priority basis. But long before this takes place, the squadron engineer officer has been inspecting engineering plants and going through reams of job order requests that have piled up on his desk. These are culled over and either assigned a priority for an upkeep period alongside a tender or turned over to the naval shipyard's Board of Inspection and Survey.

EXERCISES AND INSPECTIONS aren't the only things that keep crew members aboard a squadron of destroyers in top shape. Morale is another factor. A great deal of this is taken care of through leave and liberty but another factor is sports.

During the latter part of the baseball season while the New York Yankees and the Milwaukee Braves were getting ready to fill their stadiums with World Series fans, softball teams from DESRON 8 were battling for their own championship.

The squadron commander set up the tournament for the ships in his command to boost team play among crew members. After a 42-game schedule a plaque or trophy was to be awarded the winning team.

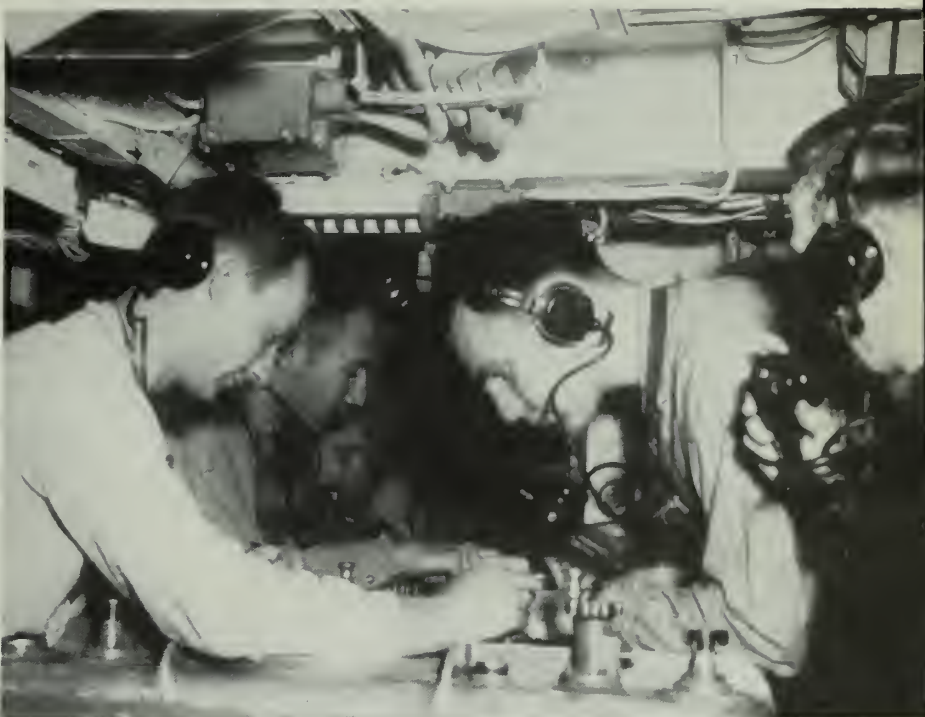
Team play is not left entirely on the field of sport. It is brought back and put into practice aboard each ship. One of the fastest ways to bring a ship to its full fighting peak is through concentrated teamwork.

Another way is by constant training and again, the guiding hand of the squadron commander sets the pace. The pace is quickened during refresher training at Guantanamo Bay, Cuba. This is the Atlantic Fleet's major training base for the advanced team training of all ships from carriers and cruisers to destroyers. During the five weeks of carefully scheduled exercises, the ship is brought to full war readiness.

Readiness is brought with them when the ships move into the Mediterranean and are assigned to the Sixth Fleet. While crossing the Atlantic, the commodore exercises his group in replenishment-at-sea and advanced tactical maneuvers, which will be everyday work in the Sixth Fleet.

THE SQUADRON COMMANDER exercises his squadron from the bridge of the flagship. From this point he gives all course and speed changes with the flagship getting the information the same way and at the same time as other ships—by means of visual, voice or radio message.

Since the ships of Destroyer Squadron Eight are assigned to Destroyer Flotilla Six—the anti-aircraft defense specialist in DESLANT—Commodore Coxe has many opportunities to exercise his ships. Ships assigned to the operational control of the Sixth Flotilla commander become experts in early warning procedures, aircraft interception control, and AA



BELOW DECKS destroyer men work computer to direct 5-inch gunfire. Exercises give squadron commanders information on how well ships operate in combat.

gunnery exercises used in protecting task groups.

Training exercises vary in length and complexity but each strains minds and muscles to the aching point until men turn in at night knowing they've done a full day's work. But the training does not stop when the ships become one solid thinking and acting unit. Continuous training is necessary to stay at this high peak of operational efficiency.

The eight ships with the big gold figure "8" with the four gold stars on either side are a unit—a unit to work, act and think as one. They, like every other destroyer in the Navy, have a job to do. And it takes men like Commodore Coxe and his staff and other squadron commanders and their staffs to help bring these ships to the peak of Navy standards.

—Thomas Wholey, JOC, USN.

ON THE GO—Squadron commanders set up problems to keep their ships and men in state of readiness. These include such operations as refueling while at sea.





demonstrated her potential striking power. The jet fighters and bombers, and propeller attack aircraft of Carrier Air Group Three, repeatedly surpassed established operational records.

Sara was a busy gal during her tour in the Mediterranean. In March she participated in combined NATO exercises in the Western Med, and carried the Danish Minister of Defense and his party aboard to witness them. During April and May, she devoted most of her time to regular at-sea training operations and exercises, managing to sandwich in visits to ports in Italy, France, Spain and Greece.

June was highlighted by a visit from their Royal Hellenic Majesties King Paul and Queen Frederika of Greece. Accompanied by high ranking Greek officers and U.S. officials, the King and Queen were greeted with a 21-gun salute, and witnessed a demonstration of naval air power by Carrier Air Group Three.

During that same month Sara put on a 16-hour aerial demonstra-

Super Sara — Power Plus

USS SARATOGA (CVA 60) is back again operating out of her home-port in Florida after spending some eight months with the U.S. Sixth Fleet in the Med.

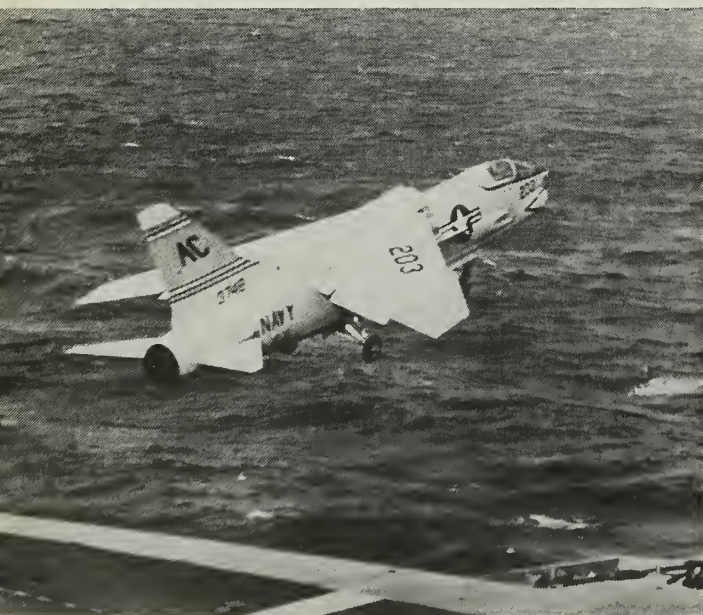
You might call her a sample of U.S. mobility in action. Besides her

regular duties, she took part in operations off Lebanon where she furnished air support for the U.S. Marines who landed there, and has moved her floating airfield to thousands of different locations at sea.

Throughout the cruise *Super Sara*

tion during which 222 operational sorties were flown by the pilots and crews of the air group. Their training missions consisted of everything from high-level, pinpoint bombing to photo reconnaissance, fighter intercepts, long-range simulated at-

ON THE ALERT—An F8U-1 *Crusader* is launched by steam catapult. Right: Pilots of VF 32 receive pre-flight briefing.





FLEET FLEXIBILITY was demonstrated more than once during *uss Saratoga's* tour of duty with the Sixth Fleet.

Mobility

tacks, and rocket, bomb, and cannon firing exercises.

In mid-July, *Saratoga* departed the Western Mediterranean for Lebanon. Within 12 hours of her departure, she was lending air support to the Marine landing near Beirut. As the Fleet moved toward its rendezvous off Lebanon, *Saratoga* commenced a schedule of round-the-clock, day-and-night flight operations. With the exception of one week in port, her aircraft flew reconnaissance, patrol, and air support missions continuously during the Lebanese operation until relieved of those duties on 5 September.

Names like Baalbek and Rayak took on significance in the form of small villages, towns, cities, and airfields. Every nook and cranny of Lebanese territory became as familiar to the pilots and crews as the carrier's flight deck.

During August the squadrons logged more than 5000 hours of flight time. The all-weather *Demons* of Fighter Squadron 31 topped all the other jet squadrons aboard in total sorties flown, as well as total airborne hours.

Pilots of VF-32, flying the super-





GOING HOME—USS *Saratoga* (CVA 60) says 'so long' to USS *Forrestal* (CVA 59) and USS *Des Moines* (CA 134).

sonic F8U-1 *Crusader*, compiled a total of about 2700 hours for the cruise. Nearly 800 of these hours were flown during the Lebanese operation. This was the *Crusader's* first operational deployment. It proved to be a fully effective addition to the Navy's stable of carrier jet aircraft. Planes of VFP-62, Detachment 43, flew over 1000 hours during the cruise and during the month of August averaged 46.4 hours of flight time per pilot.

After she completed her watch in the Mediterranean, task force change of command ceremonies took place aboard *Saratoga* on 17 September, at Augusta Bay, Sicily. Rear Admiral George W. Anderson, who had taken command of the Task Force in July, turned over command to Rear Admiral Charles D. Griffin. RADM Griffin arrived in Augusta Bay in USS *Forrestal* (CVA 59), which relieved *Saratoga* as the flagship of Task Force 60. The task force normally consists of two carriers, two cruisers, and sev-

eral squadrons of destroyers.

As a departing gesture to Vice Admiral Charles R. Brown, then Commander, U.S. Sixth Fleet, Rear Admiral Anderson staged what was probably the first supersonic farewell salute ever rendered. Knowing this would be his last chance to salute COMSIXTHFLT before departing the Mediterranean, he set up a supersonic saluting battery of eight F8U-1 *Crusader* aircraft. As the eight jet fighter interceptors arrived in the vicinity of the admiral's flagship, USS *Des Moines* (CA 134), they peeled off and broke the sound barrier with 15 resounding "sonic booms." An AD6 *Skyraider* circled the flagship towing a banner with three white stars on a blue background while the supersonic saluting battery boomed out their tribute. The customary return salute to Rear Admiral Anderson was a simple 13-word message, "Boom, Boom, Boom . . ."

During the eight-month deployment with the Sixth Fleet, *Saratoga*

steamed over 55,000 miles and logged some 12,000 carrier landings, while her aircraft flew over 21,000 hours. With minor exceptions, all fuel, food, and supplies for the entire period were received from ships of the Sixth Fleet's Service Force while underway.

In addition to the operations, a major effort went into the field of promoting goodwill, friendship, and understanding among the people of Europe and the Middle East. A myriad of foreigners were afforded the opportunity of visiting the ship, and in many cases, witnessing the operational capabilities of Task Force 60 in action underway. Approximately 18,000 visitors were received on board while in the Med. These included correspondents from 10 nations, military personnel from many of the NATO countries, high ranking civilian officials and guests, and perhaps most important, the thousands of people who greeted the ship in every port.

Among those entertained by the ship were groups of orphans. They were taken on tours of the ship which ended in a messing compartment where they were treated to ice cream and cake. Before leaving the ship each child was presented a remembrance gift.

While in the Mediterranean, officers and bluejackets from the carrier visited the ports of Gibraltar; Naples and Genoa, Italy; Barcelona and the Isle of Palma de Mallorca, Spain; Cannes and Nice, France; Athens and Rhodes, Greece; Suda Bay, Crete; and Augusta Bay, Sicily. Organized tours to Rome, Madrid, Paris and many other historical landmarks were enjoyed.

The men on board *Sara* saw many interesting sights, met many interesting people and worked hard while in the Sixth Fleet. But sometimes a man likes to see something more familiar—Welcome home.

DAWN PATROL—During Fleet rendezvous off Lebanon, USS *Saratoga* (CVA 60) maintained a round-the-clock flight operation. Here, jets prepare to blast off.





Touring Taiwan

LIBERTY on the island of Taiwan among our friends and allies, the Chinese Nationalists, is an interesting experience enjoyed by Navymen in the Far East. The terrain of this picturesque country, which is a little larger than the combined size of Massachusetts and Connecticut, ranges from rugged mountains to fertile coastal plains. The island has plenty of evidence of its interesting past. For example, Dutch-built buildings dating back to 1624, can be found near early Buddhist Temples. Samples of ancient Chinese culture and customs can be seen, along with the ways of modern China.

Upper left: Navymen take a look at old cannons in court yard of Providencia Castle. *Upper Right:* Picture is taken in front of Pagoda with Chinese Nationalist servicemen. *Right:* Entrance to Tainan through 400-year-old wall that once guarded the city attracts attention. *Lower Right:* Navymen visit Providencia Castle built by Dutch in 1624. *Left:* Temple in Tainan city.





BACK TO SEA—Task Force 88 leaves Rio de Janeiro, Brazil, and heads back out into Atlantic to continue operations.

It's Here and Gone: Task Force

A TASK FORCE is a subdivision of a Fleet composed of several types of ships according to operational necessity. The number and type of ships assigned varies according to the particular task or mission for which the task force is organized.

During war, a task force is usually assigned the job of accomplishing a specific military objective. In peacetime, however, it may vary from a complex, offensive/defensive readiness test to a scientific expedition or resupply trek to Antarctica or even an evaluation exercise.

As an example, take Task Force

88. Its operations, shown on these two pages, are typical of a peacetime task force organized for a specific detailed mission. Normally, a task force, as in the case of TF 88, is dissolved after its assigned mission has been accomplished.

Task Force 88 was designed and organized specifically for the purpose of evaluating the capabilities of an ASW task force during sustained operations in a remote sea area. This called for testing—under extreme weather and sea conditions—air and surface ASW techniques, various refueling methods, and other

operational procedures. In addition, Task Force 88 had the job of obtaining hydrographic data.

The ships that formed TF 88—like any other task force—were picked for their ability to solve the problems at hand. In this instance, antisubmarine support aircraft carrier *uss Tarawa* (CVS 40) was the big lady. She carried the planes and helicopters of VS-32 and HS-5 that participated in the air phases of the ASW operations.

uss Norton Sound (AVM 1), Fleet oilers *uss Salamonie* (AO 26) and *Neosho* (AO 143), and de-

CAUTIOUS BEARS—*USS Bears* (DD 654) circles iceberg. Right: Copters take off for cool, stormy ASW operations.





ROUGH AND COLD—T. J. Cobb, PH2, USN, finds job on the cold side. Rt: Task force hits rough weather in Atlantic.

Eighty-Eight

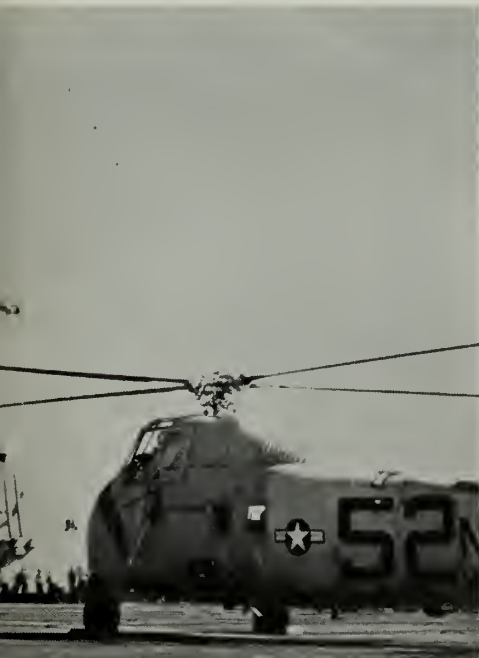
destroyers *uss Bears* (DD 654) and *Warrington* (DD 843) also participated. Smallest of the TF 88 ships were the escort vessels *uss Hammerberg* (DE 1015) and *Courtney* (DE 1021).

Highlight of the South Atlantic operation for the crews of TF 88 ships was a visit to Rio de Janeiro. The Navymen found that the Brazilian city lived up to its reputation for interest, color, beauty and friendliness.

After a five-day visit, the ships of TF 88 departed for further operations and on to their home ports.



SNOW JOB—Deck of *USS Tarawa* (CVS 40) gets covering of snow. Below: Task Force destroyer during operations.



Oklahoma — Where Naval

OKLAHOMA! . . . Mention the name of that south central state to the average Navyman and most likely he'll immediately start a bull session about the "Sooners"—often the nation's top ranking football team; the late Will Rogers; the old battleship or the popular Broadway musical and movie by that name.

But to a good many of the Navy's enlisted men—about 24 to 29 per cent of them—Oklahoma means quite a bit more. Unless you're an airdale or familiar with the training given to the 14 different Group Nine ratings, you may find it hard to believe, but more than 16,000 Navy-men are trained there each year.

At Norman, located in the center of the state and more than 1000 miles from either the Atlantic or Pacific Oceans, is "The Gateway to U.S. Naval Aviation." Although officially known as the U.S. Naval Air Technical Training Center, it's simply "NATTC Norman" to more than 120,000 active duty Navy-men who were trained there. (Incidentally, Norman, Okla., is also the home of the famed "Sooners" from the University of Oklahoma.)

The main attraction of NATTC Norman is the Airman Fundamentals Class P School where embryonic airmen take their first steps into the highly complex and intricate fields of naval aviation. The students at this school—fresh from the recruit training centers at Great Lakes, Ill., and San Diego—are given a thorough indoctrination in naval aviation, preparing them for further training in a more advanced or specialized school, or ready to perform their duties with an aviation unit of the Fleet.

More than 24 per cent of the sailors completing recruit training today are selected for duty with the Navy's air arm. And most of them are sent to NATTC Norman directly from boot camp. Approximately 310 students begin training there each week.

THE BASIC AVIATION SCHOOL at Norman, Okla., has the distinction of being the only one of its kind for Navy-men, although similar schools are maintained in Jacksonville, Fla., for Waves and Marines.

NATTC Norman was first estab-

lished back in 1942 but was decommissioned after World War II. It was reactivated in January 1952, with a mission of "conducting and supporting a training program for selected trainees in the field of naval aviation which provides basic knowledge common to the naval aviation (Group IX) ratings and assigns the man to further training for which he is best equipped, commensurate with the needs of the service."

And that's just what NATTC Norman does. Since its reactivation, well over 80,000 bluejackets have been trained there and sent directly to more advanced schools. Graduates usually go to Class A schools at Olathe, Kans; Memphis, Tenn; Pensacola and Jacksonville, Fla; Philadelphia, Pa., Glynco, Ga., or Lakehurst, N. J., for more specialized training.

Until July 1956, the schooling offered at Norman consisted of an eight-week course basically designed to prepare an individual trainee for all phases of advancement to Airman (AN). Today, however, the emphasis is on getting qualified students trained and assigned to duty in a shorter time. The basic course has been streamlined to six weeks and now offers training in a specialized area at the preparatory school level.

DURING THIS ACCELERATED training, the students are divided into three groups and given different courses. The first, includes those with an aptitude for electrical or electronic occupations; the second, for those suited for mechanical work, and the third group, those who are inclined toward operational and clerical type duties. This stepped-up training enables Fleet air units to get their jet mechanics, storekeepers, electronic technicians and other skilled personnel from the "training pipeline" much more rapidly than in the past.

The Electrical/Electronics course is geared to provide students with the fundamentals of D.C. electricity and a workable knowledge of mathematics and physics. It also familiarizes the students with the use of common hand tools applicable to the various aviation ratings that work with electricity and electronics.

POOL JOB—Prospective airmen are indoctrinated in water survival techniques.



Airmen Are Born

In the mechanical course the students also study basic mathematics and the use of hand tools. In addition, they acquire a knowledge of layout and measuring tools, plus becoming familiar with basic aircraft hardware.

The third course, operational and clerical, also finds the students studying mathematics and physics, together with electricity, layout, security of classified material, and the old clerical standby—typing.

Although the average educational level of the students trained at NATTC Norman is that of a high school graduate it varies from a grade school through a college level education. All of the trainees, however, get the same basic fundamental background at the school.

In this respect, don't let the use of the terms "basic" or "fundamental" mislead you, as the subjects taught during the four weeks of academic study in the three specialized fields mentioned earlier are about on a par with that offered in a course of college engineering.

Subjects range from simple math up to and including trigonometry,

and in physics, for example, the students study theory involving atomic structure. The school—in more ways than one—carries out its mission by giving its students the opportunity to absorb advanced knowledge.

DURING THE FOUR WEEKS of academic study, the prospective airmen also get an understanding of the various requirements for each rating within their specific occupational group.

After the month of specialized study, the aviation trainees attend a two week aircraft familiarization course which provides them with information and practical factors leading toward advancement to the rate of Airman. This, in itself, is a big incentive for the trainees, as a promotion—even to AN—means more money and some added prestige.

The one point that is stressed more than any other during the training at NATTC Norman—and at all other Navy training activities as well—is safety. Extra stress is placed on safety in regard to handling aircraft because such a task not



NAVAL AVIATION trainees listen to lecture in classroom at NATTC Norman.

only affects the lives of the plane handlers, but lives of their shipmates. The aircraft is valuable, too.

Practical work on taxi signals, water survival, fire fighting and a check-out with a plane's inter-communications system are among the wide range of subjects offered during the five weeks of training. In the last week of school, the students get a chance to rev up a 300 horsepower AD-type aircraft. This is con-

READY TO LEARN — Some of Norman's 2500 students line up to begin the day's study of naval aviation.





HOT LESSON—Future airdales get full treatment on safety including fire-fighting, with each student getting turn on hose.

sidered to be one of the high points of the final week of training as it gives many of the future airmen their first feel of a "live" aircraft.

A LONG WITH THIS PRACTICAL and academic training, the school conducts three other programs. They are designed to help the trainees find which they are best fitted for and steer them into those career channels. These programs include guidance, testing, and selection and assignment.

In the guidance phase, each trainee is assigned an adviser. As a general rule, each adviser takes care of eight to 10 students and is available to assist them during their stay at NATTC Norman.

The testing service (conducted by specialists skilled in evaluating human abilities and capabilities) observes the trainees while at school.

SPORTS—Although training is intense there is still time for many sports.



Their performance is carefully evaluated, as it will be used as a guide for future assignments.

In the selection and assignment phase, each student is interviewed by a civilian counselor during his final week at school. After the interview each man is assigned to some specialized Class "A" school. As a result of this interview, the trainees are usually assigned to the school of their choice or to the ones they are best suited for. It's the goal of the selection and assignment program to place the right man in the right job, as well as to promote good morale by giving the man a voice in his future career with the Navy. This is not always possible, however, as such factors as physical qualifications or small quotas for certain schools sometimes limit assignments.

The commanding officer of NATTC Norman is CAPT Lloyd W. "Mike" Parrish, USN. A veteran of 26 years of naval service (he graduated from the Naval Academy in 1932 and was designated a naval aviator in 1936), he's considered by those under him as a "stern but fair skipper."

"Sure he's rough," an enlisted man assigned to his staff said. "He can dress you down until you feel like crawling under a thimble. But you know if he did dress you down, you deserved it. He's a fine skipper—you won't find many like him." Those words pretty much sum up the attitude of all officers and enlisted men toward CAPT Parrish, who has commanded NATTC Norman since Sept 1955.

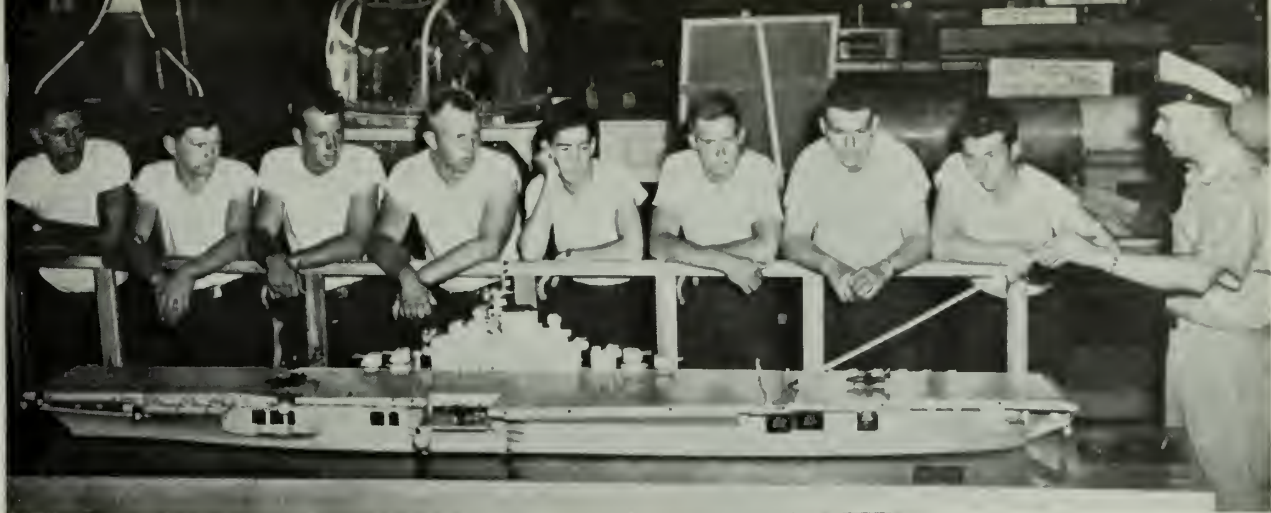
The exec is CDR Gerald R. Pearson, USN, who arrived at Norman in September 1957, after a tour of duty as Chief Staff Officer of Fleet Air Wing Six based at Iwakuni.

IN CHARGE of all students who pass through the base is CDR James H. Downs, USN, a former enlisted man, who has 27 years of naval service. As Director of Training for the Aviation Fundamentals School, he has more than 200 supervisors and instructors under him. This includes about eight officers, 26 civilians and approximately 175 enlisted men. The instructors at Norman—all first class and chief petty officers—are of the highest caliber to be found anywhere in the Naval Establishment. Each of them is an outstanding man within his own rate, and qualified to teach and advise the students who are usually unfamiliar with naval aviation. Thus, it's essential for the instructors to keep up to date on both the latest developments in naval aviation and the newest techniques of teaching.

Development of such a teaching staff is perhaps one of the most important behind-the-scenes functions at NATTC Norman. This is the responsibility of the Training Facilities Division which must furnish both competent instructors and adequate training.

The training methods division provides courses for all instructor and supervisory personnel. They range from basic classes in effective teaching to a course in creative thinking.

The latter is popularly known as "brainstorming." During this class, instructors are urged to forget the existence of such phrases as "It can't be done" or "It won't work" and to concentrate on ways, however fantastic, in which "it might be done." Used effectively in industry, the application of creative thinking has also solved several difficult problems at NATTC.



BIG PICTURE—Various duties and men necessary to operate an aircraft carrier are explained to group of students.

A course in leadership and military psychology is also given to all new instructors. This course originated at Norman as an outgrowth of changing military thinking. Another class, small but popular, is that dealing with chalkboard techniques which teaches the instructor to illustrate his lectures with three dimensional drawings.

IN AN ACCELERATED TRAINING program such as that offered at Norman, the students find it necessary to study during most of their spare time. Since no liberty is granted to the "P" school students during the week, the base maintains a wide range of recreation facilities that are open every night. And no finer facilities can be found anywhere in the Navy. There's more than enough to satisfy the most demanding tastes or most energetic participant. You'll find clubs for the enlisted men, chief petty officers and commissioned officers, all of which offer dances, game nights, television viewing, a snack or a dinner.

Last year the EM club opened a new cafe designed primarily for couples and families. The CPO club made a few improvements too. They added a new television room, complete with color TV, western style furniture and knotty pine decor. The room, when dedicated, was named the Parrish Room, in honor of CAPT Parrish.

The 1009 acre base has its own roller skating rink, bowling alleys and gymnasium. The bowling alleys are open for league play four nights each week, with the other three being available for open bowling. In the gym there are all types of facilities for both the viewer and participant. Here a student or member of ship's company can play basketball, handball, volleyball, table

tennis, badminton, pool—or check out boating equipment, hunting and fishing tackle, or golf clubs. NATTC Norman also maintains an 18-hole golf course, tennis courts and two swimming pools—one indoor, heated—which is open daily throughout the year.

For those who are "do-it-yourselfers" there is a large hobby shop equipped with almost every power tool imaginable. Here talented personnel turn out handiwork ranging from ship and plane models to racing cars and elaborate furniture.

Then there's a well-stocked station library with the very latest top best sellers in both fiction and non-fiction. It also carries all sorts of technical publications, as well as newspapers and magazines.

The station theater can be counted on to present the latest movies daily. Several times each year, live shows are presented by many of the country's top entertainers.

Another extra-curricular activity that is quite popular and in constant demand for parades and military functions throughout the Sooner State is the Naval Air Technical Training Center's drill team. Attired in dress blues or whites, depending upon the season, with white leggings, belts and helmets, the team presents precision exhibitions of close- and extended-order drills. Rifles with fixed bayonets are used in plain and fancy variation of the standard military drills. The size of the team fluctuates from about 18 to 25 members owing to the constant change of student personnel.

All in all, between long classroom studies and the many recreational facilities available, the students have more than enough to keep them occupied during their stay at the school in Norman.

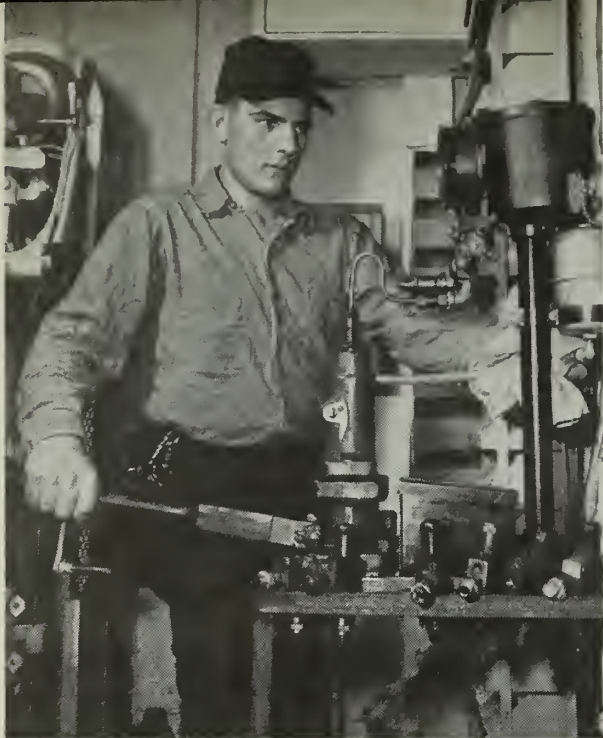
WHEN THE STUDENT is graduated from the Aviation Fundamentals School, he takes with him important preliminary training that will aid him throughout his naval career. The knowledge that he has gained during his six weeks of training, combined with further specialized advanced training and actual Fleet experience, will enable him to perform his duties as a highly trained petty officer and technician.

In an age when satellite and space endeavors are common, the need for more trained aviation specialists cannot be overemphasized. The Naval Air Technical Training Center at Norman, Okla., has passed far beyond the experimental stage. It's operational—paying off by supplying the Navy with well rounded potential technicians whose morale and enthusiasm is tops, because they have been scientifically trained and selected for an important job in a fast changing Navy.

—H. George Baker, JOC, USN.

HOBBIES—Norman has fully equipped hobby shop for the 'do-it-yourselfer.'





FROM MACHINE SHOP to electronic lab highly skilled Navy men keep complex gear in shipshape condition.



Everyone's an Expert

THE NAVY is made up of experts. From the Chief of Naval Operations, to the captain of a Navy ship, to the petty officers—they are all experts in their own field.

Petty officers make up the mass of Navy experts. The PO starts at the very bottom and as he becomes more and more proficient, he advances in rating. And as he advances in rating, he is assigned jobs that are more demanding of his skill. A PO's responsibility grows from the very first mark of an expert—the

crow arm insignia of a third class petty officer.

And with this crow, comes a new job. A job of teaching. It's the responsibility of every petty officer not only to learn his rating, but also to pass on this knowledge to those men who are under him, starting at the bottom.

After the man at the bottom—the apprentice—has been taught the groundwork of his rating, as an expert, the petty officer works with him, to make sure the work is done

CAPABLE HANDS—Above: Camera shutter is repaired. Below left: Airmen repair plane. Rt: Air controlmen at work.





EXPERTS IN MANY fields are needed. Left: Torpedo is readied for service. Rt: Missileman checks Sidewinder circuit.

— In This Man's Navy

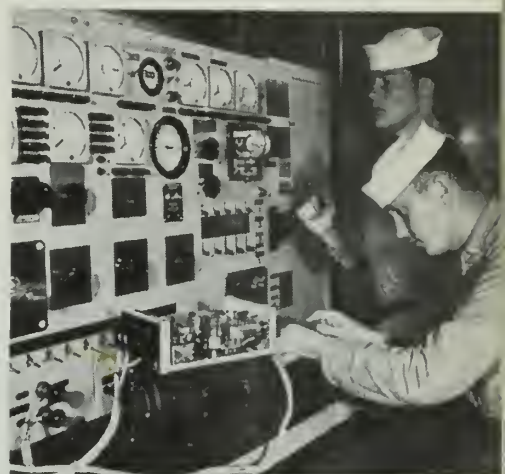
right. As the apprentice works, he too becomes proficient. Soon, he's the petty officer; his teacher has moved on to new duties, and now he is the instructor—the expert in his particular field.

And so the story goes, throughout a Navy career. Everyone starts at the bottom, and with an eye to the top rung of the ladder, he works—not only to learn his job, but to pass his knowledge on to other men in the Navy.

How often have you thought of

teaching as being some foreign job, a job that you think you couldn't do or just wouldn't want to do? But it doesn't matter whether you are a boatswain's mate, a yeoman, an electronics technician, a radioman, or a gunner's mate—as a petty officer you are a teacher.

Although much of this teaching is carried on in a Navy school, more often than not, it is done in the ships, shops, and offices throughout the Navy, in the form of on the job training, by petty officers.



SKY-HIGH—Navymen receive radar training in plane. Above: Navy electricians make repairs on electrical gear.



They're Headed Back to School

WHAT ARE YOU going to do when you retire?

This is a problem to be considered seriously and it's one which, sooner or later, you'll want to resolve.

Among the many possibilities open to most Navymen who are approaching retirement age is the field of teaching. It offers many opportunities.

This is not an original suggestion. Many Navymen before you have been in just the position you are today. They were forced to ask themselves the same questions you are asking. Many came to the conclusion that the teaching profession was, for them, the proper choice.

Like you, they asked themselves the questions: Do I *really* want to teach? Will I gain as much personal satisfaction here as I will in some other activity? At what level should I teach? How much does it pay? What are the requirements? How do I go about it?

It would be helpful if you were

able to sit down and discuss these questions with some of the Navymen who have already made the big step. To provide the next best thing, the Retired Activities Section of the Bureau of Naval Personnel asked a group of retired Navymen who are now actively engaged in teaching, and we are passing on to you the benefits of their experience.

All the following remarks come from retired personnel with former enlisted status and they serve to point up the fact that the field of teaching has opportunities for the POs and chiefs getting ready to go into the Fleet Reserve.

In their comments, one point was made clear: Many of you are qualified to teach and are badly needed in the teaching profession. Most of you are best qualified to teach a vocational subject. You will need the desire to teach, the experience you have already gained in the Navy, plus maybe one or two special instructor courses. The Navy instructor course at Norfolk, Va.,

or San Diego, Calif., and any instructor billets you have held while in the Navy, will help.

A retired chief carpenter (CWO 2) is using his Navy-gained experience by teaching at a junior college in California. He says: "Trade experience, rather than academic training, is stressed when one is to teach a specific trade subject." Before he accepted this job, the only special training required was one course in "Techniques of Teaching," and one in "Audio-Visual Aids in Instruction." He went on to say that a provisional accreditation to teach is sometimes granted for the first year without taking these courses, but that the teacher's training must be completed before a regular certificate can be obtained.

A high school shop course is being taught by one retired CPO. He told us that some special educational-type courses were required, but that the Navy instructor's school he had attended, and the instructor billets he had held, were counted toward these required courses.

A retired chief electrician's mate is Chief Instructor at an electrical and technical school in Boston, Mass. "The important factors in my acceptance by the school" he said, "were my experience as an instructor at the Destroyer Engineer Officer School in San Diego, Calif., and the all 'round electrical training while in the Navy. I highly recommend the Navy Instructor Training School."

There are also openings in Civil Service for qualified instructors. One chief gunner's mate in Maryland retired from the Navy and immediately took a job as GS5 at an Army ordnance school. This Chief, with a grammar school education, has since advanced to GS9, and is paid \$5440 a year. He says, "We now have six other chiefs here at the school. My advice is to get all the experience possible while still in service. There has never been a time, to my knowledge, when a well qualified instructor couldn't find a job; and where are there better qualified instructors than in the Navy?"

Another Navyman is an electrical instructor for the Air Force. Here are his ideas: "I suggest that anyone who is doing any instructor-type

MOST LIKELY spot for a retired Navyman to find a teaching billet is in his Navy rating. Here CPO picks up valuable experience while teaching use of tools.



as Teachers

work while in the service try to get as much school preparatory work as possible while in the service and follow through immediately upon retirement. The need for teachers grows every year."

"I had no additional training to qualify as an instructor, other than my years of experience in the carpenter shops throughout the Navy," wrote a chief damage controlman. He is now an instructor in manual arts (wood shop and mechanical drawing) at a private school.

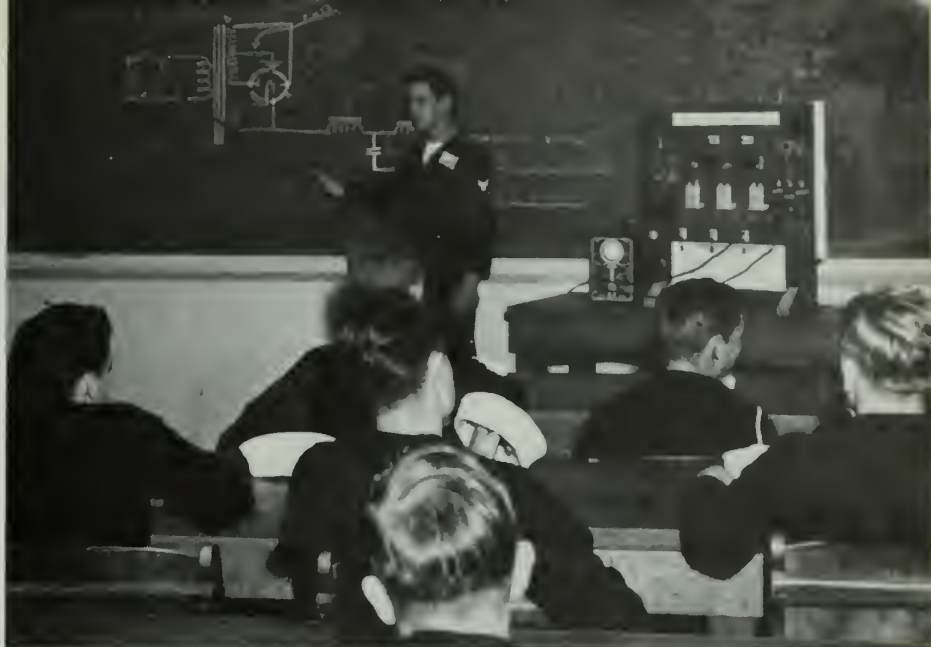
IF THE VOCATIONAL type of teaching doesn't appeal to you, here's an alternative: Go to college and earn a bachelor's degree, then teach an academic subject. And don't let the bachelor's degree scare you. Several men told us they had earned their degree after leaving the Navy, and then went on to teaching.

But why wait? You have time to work toward that degree while still on active duty. It's being done by lots of Navymen, but not nearly so often as is possible.

Here's what one "second guesser" had to say: "I would carry only one course at a time while in the service. I believe under such conditions that a man could retire with a degree—in 20 years." He's right; it's possible. In fact, according to one college counselor, if you take one course at a time, it would probably take you exactly 20 years to get a bachelor's degree.

He explained that at most colleges, night classes meet three times a week, for one hour each night, and the course lasts one semester—16 weeks. With each year divided into only two semesters, it's possible to finish only one two-semester course in one year. It's slow work at that pace, but you can step it up. Take two courses at one time, for example, or go to summer school, or take USAFI courses—they will all help to cut down the time required.

One retired chief had just such plans. With frequent transfers, however, he found it quite difficult. Here's the story he tells: "I joined the Navy in 1933 with a high school diploma. I earned 240 semester hours—only 120 are required for a bachelor's degree, provided they are the specific courses required for your particular major—of college credit at nine different colleges.



IN THE GROOVE—Classroom experience gained as instructor in a Navy school is a natural lead to teaching in civilian life if you feel you like the work.

This is the equivalent of eight years of college work. A freshman in 1934, I became a senior in 1949, and finally received a degree in 1957. One of my fondest hopes was to be able to demonstrate that an enlisted man could graduate from college by applying himself while on active duty—and I very nearly made it. I applied for transfer to the Fleet Reserve, and just six weeks after being released, I received my bachelor's degree." The problem the chief had was not because he hadn't earned enough college credits, but the difficulty in getting together one year of "resident credit" at a single university. A certain amount of resident work is usually required before a degree can be earned.

If you do decide to earn your degree and teach an academic subject, here are a few things to consider. Do you want to teach in an elementary school, high school, or college? This is important. If you intend to teach in either an elementary school or high school, you will need a bachelor's degree, which includes certain educational courses. On the other hand, if you intend to teach in a college, you should continue with the college work, and earn at least a master's degree.

A California Navyman points out that he found certain problems connected with teaching at the high school level. A Pennsylvania man agrees and gives these as his reasons: "The weekly class load in a college, for example, is between 15 and 20 hours, and there is nearly always a free day or so during the week. In high schools, most teachers are

tied down to five days each week." Another point of view was expressed, however, by a Missouri man. He said: "The challenge of the public school should not be overlooked for the synthetic glamor of the university or college. Many city systems have higher salary schedules than the smaller college or university.

Many letters tell of the advantages of teaching. As one man puts it, "I get two and one-half months' leave with pay each year and get a '72' every weekend." Remember when you thought the "kids" were out of school all the time? If you're the teacher, you get many of the same vacations. (And you may feel you need them.)

These comments offer you, at least, a point of departure. Here's a distillation of other points:

- If you aren't sufficiently motivated to teach, forget about it. Under such circumstances, the pay isn't worth it.

- Have all your experience connected with teaching listed on your DD 214 when you are separated from the Navy.

- Write the Department of Education in the State where you hope to teach for full information regarding educational requirements.

- Whether the salary is high or low, the satisfaction of teaching the younger generation is gratifying.

In short, you must want to teach; next, you must prepare yourself; and last, you must apply yourself.

Sounds just like the Navy you are about to leave, doesn't it?

—Erwin Sharp, JO1, USN.



NAVYMEN had hot time at fire-fighting school. Left: Trainee makes exit from compartment. Rt: Students tackle fire.

Fire Fighters

"THEY'RE A GOOD BUNCH of men and any skipper would be proud to have them aboard."

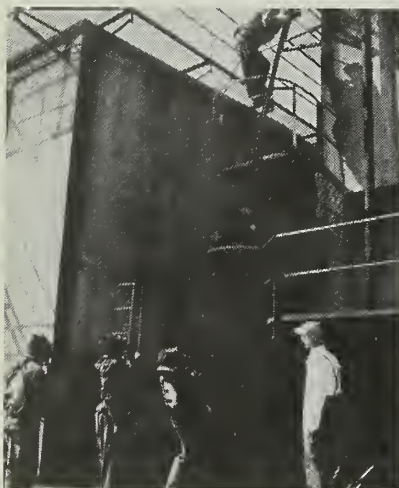
Thus, certain selected members of the crew of *uss General William Mitchell* (APA 114) graduated *cum laude* from the Military Sea Transportation Service fire-fighting school at Manchester, Wash.

MSTSNORPAC Damage Control instructors have, in their time, seen a lot of men come and go. They're a hard group to impress, but when *Mitchell's* crew finished the two hot and tough days of intensive training, their instructors admitted the students could take all they could

dish out. And they put out all kinds of fires.

The training included one day of classroom study where *Mitchell's* sailors learned the fundamentals of all types of portable and fixed fire-fighting equipment, fire-fighting procedures and methods of prevention.

The second day was devoted to fighting actual fires in a mock-up of a ship's compartment and in open tanks. During this phase of the training, the sailors gained first-hand experience in the use of oxygen-breathing apparatus in smoke-filled compartments. They were also required to rig fire main jumpers.



OIL FIRE is handled by students. Above: Firefighters scale ladder to practice entering smoke-filled compartment.





SAMPLES—Petroleum students check tank farm and (rt.) observe gravity of oil in the school's petroleum lab.

Fuel Feeders

OUT IN THE PACIFIC on a well known island the Navy runs a school that has a lot of power behind it. It is the Navy's Petroleum School located at Pearl Harbor, Hawaii. There, men from all the U.S. armed forces, including civilian employees, and military personnel from friendly foreign nations, are trained to handle store, transport and test petroleum products.

In a six-week course students at the school are shown how to run military fuel farms and air station refueling systems. Another special five-day course trains men for duty on board oilers and tankers.

The six-week course covers all phases of the petroleum field, from the formation of crude oils in the earth to the ultimate use of the refined products by the armed forces.

Students are taught to perform tests of petroleum products and to run the maze of pipes and valves found on a tank farm or oiler. They also learn fire fighting and emergency plastic pipe repair. Since many petroleum products become useless when mixed and leaky pipes can cause the loss of thousands of dollars worth of fuel, the value of such instruction is obvious.

The officer in charge of the school, LTJG G. E. Duffy, USNR, holds a degree in geological engineering from Colorado School of Mines. Six

CPOs serve as course instructors.

The school's facilities include a two-story quonset hut containing classrooms and offices, a working tank farm with a 15,000-gallon capacity, a model tanker of 15,000 gallons' capacity, a standard railroad tank car and a mobile refueler truck.

The school is open to personnel in rates and ranks from PO3 to lieutenant commander. It has graduated over 1300 students in 43 classes since it was opened in 1949.



LIKE REAL—Students practice on mock tank car (above) and Navy AO (below).





SOMETHING FOR HOME—Gitmo's Exchange is good source for souvenirs. Below. Activities are listed on board.

RECREATION CENTER SPECIAL SERVICES OFFICES

BASE BALL & SOFT BALL DIAMONDS
PARK & BEACH RESERVATIONS
FOOT BALL & SOCCER FIELDS
GOLF BALL DRIVING RANGE
ATHLETIC GEAR ISSUE
ROLLER SKATING RINK
BASKET BALL COURTS
VOLLEY BALL COURTS
FLEET RESTAURANT
AND BALL COURTS
CYCLE RENTALS
WHITE HAT CLUB
SHERRY RANGE
BILLING ALLEY
SWIMMING POOL
TENNIS COURTS
GOLF COURSE
THEATRIUM
DANCE HALL
OFFICES



SWIMMING POOL is popular spot for Fleet to beat heat.

Just Rarin' to Go

WHEN SHIPS of the Atlantic Fleet hoist anchor and set their course for Cuba, sometimes called the "Pearl of the Antilles," Navy men know that once anchor is dropped outside the breakwater at Guantanamo Bay, they will undergo the rigors of shakedown and refresher training.

They also know this base has made a concerted effort to counteract the exacting training schedule by providing Fleet personnel with recreational activities that run the gamut from horseback riding to bicycling and roller-skating.

With the stress and strain of shipboard training dominating the day and parts of the night, recreation at Guantanamo Bay is big business and is regarded as an important adjunct to providing a working base for the Fleet.

One of the most popular recreational spots is the 100-horse-capacity Naval Station Corral that features group rides for ships and classes for the neophyte. The "horsey set" is growing in size, and many Navy men

SADDLE-ITES enjoy 100-horse corral and bridle path.



ALL HANDS



PICNIC AREA has swimming pier. Good for spear-fishing.

to Guantanamo

are becoming real experts in this sport.

A very important boost to morale is the presence of a well-equipped club properly referred to as the "White Hat Club."

For sailors attending the huge outdoor movie, a modern drive-in or rather walk-in restaurant has been constructed.

Among the recreational facilities not usually found on a naval installation are the more than 50 bicycles, a roller-skating rink with professional-type skates available, and an Olympic-size swimming pool that will cool off 200 at a time.

Add to the available list:

Picnic grounds with swimming facilities, a golf course, fishing boats and spear-fishing gear, basketball and volleyball courts and athletic fields along with all the necessary sporting gear. Now you see why ships hitting Gitmo head for the Special Services Office to set up their recreational schedule while training in the area.

—Jim French, JO1, USN.

WHEEL GONE—Well supplied bike center attracts many.



DECEMBER 1958



SAILING SAILORS—Boating in tropical waters is enjoyable. Below: EM'S "White Hat Club" is super de luxe.



LETTERS TO THE EDITOR

Nuclear Power Training

SIR: I would like to apply for submarine training and duty in the nuclear power training program but the only references that I am able to find seem to indicate that storekeepers are not eligible to apply. However, it is my understanding that there are SKs assigned to the nuclear-power boats. Am I eligible to put in for this type of duty?—R. D. K., SK2, USN.

• *Hope you don't mind if we use your letter as a basis for clearing up one point. Not all men serving in nuclear-powered submarines go through the Nuclear Power Program. The only ones who do so are the hospitalmen, engineering and electronic ratings.*

Other ratings do, of course, serve on board nuclear-powered submarines. These are selected from a list of volunteers which is maintained by SUBLANT and SUBPAC. These volunteers are qualified submariners.

To get to your question, since the only ratings utilized in NPT are those mentioned above, storekeepers are ineligible. You are quite correct, however, in that there are two or three nuclear-powered submarines with SKs attached. But only one SSN has an allowance for an SK. The other SKs are on board only temporarily to assist in setting up the supply departments.

In view of the very small requirements, there has been no service-wide call for volunteers and there are no plans to issue one.—Ed.

It Makes a Difference

SIR: Will you try to untangle my tours of sea duty here in the Mediterranean, and tell me when I can expect to rotate.

To begin with, I commenced my present tour of foreign sea duty aboard USS Salem (CA 139) in May 1957. At that time Salem was flagship of the Sixth Fleet. In March of this year when USS Des Moines (CA 134) relieved Salem as flagship, I transferred to the Flag Allowance, COMSIXTHFLT. A tour with the FA is normally 18 months for a single man or 24 months for a married man with dependents on station.

I have since been married and now have my wife on station. Has my tour been automatically increased from 18 to 24 months, or will I be eligible to request reassignment at the end of 24 months from the date I started my foreign sea duty aboard Salem?—R.H.H., YN2, USN.

• *Since you are now married and your dependents are on station, your tour has automatically been increased to 24*

This section is open to unofficial communications from within the naval service on matters of general interest. However, it is not intended to conflict in any way with Navy Regulations regarding the forwarding of official mail through channels, nor is it to substitute for the policy of obtaining information from local commands in all possible instances. Do not send postage or return envelopes. Sign full name and address. Address letter to Editor, ALL HANDS, Room 1809, Bureau of Naval Personnel, Navy Dept., Washington 25, D. C.

months from the date you reported to the Flag Allowance, COMSIXTHFLT, or 12 months after your dependents arrived on station, whichever is the later.—Ed.

Fitness Reports

SIR: My questions concern correct procedure in filling out NavPers Form 310, "Report on the Fitness of Officers," for officers attached to a station on TAD and ADDU. First, which ship or station is typed in block six, the permanent station or the temporary

station? Second, in block seven, "Date Reported Present Duty Station," does this mean the permanent or temporary station? Third, should the statement that the officer is TAD or ADDU to this station be indicated in block eleven?

Throughout my naval career I have used the station where the officer is temporarily attached for all three blocks on a concurrent fitness report. But I am getting opposition and would like something to back me up. BuPers Manual reads, "The ship or station to which attached," but doesn't state temporarily or permanently attached.—B. J. S., YN2, USN.

• *Your interpretation is correct. The "ship or station" on the concurrent report is the temporary additional duty or additional duty station. The "date reported" is the date the officer reported for TAD or ADDU; and TAD or ADDU should be indicated in section 11.*

The permanent duty station will be shown on the regular fitness report which must be submitted irrespective of any concurrent reports.—Ed.

Seavey at Work

SIR: Is it true that once you have been placed on the Seavey list, or more properly, in a Seavey Segment, that time at sea no longer counts as the basis for priority in assignment to a shore billet, but that time in service becomes the deciding factor?

To clarify the question further, I offer my own case as an example. I have been on sea duty since February 1952. The cut-off date for Seavey Segment I for my rate was December 1955. Subsequently I received a Seavey Card in November 1957, which was duly completed and returned. Since then I have waited patiently for orders which have never come. Does a man in my rate who has been on sea duty a much shorter time, say since November 1955 (45 months less sea duty than I have), but who has more time in service than I, receive priority in assignment to a shorter billet?

If this is the case, I for one fail to see the justice in such preferment, and I'm sure there are many people in the same situation who will agree with me. Perhaps a more astute or disinterested observer could offer a reason for this apparent injustice.—Robert J. Simmons, ET1, USN.

• *It's true! The deciding factor is the length of time in service and not the length of time at sea; but only if everything else is equal. This particular point is no longer important, how-*

The 'Can Do' Spirit

SIR: I am aboard USS Tanner (AGS 15), along with 16 other Seabees. The other night we were having a discussion, and the subject of the Seabee insignie came up.

We know it was worn by Seabees during World War II, but do not know when it was discontinued. Could you tell us, please? Also, is there any chance that the insignie will again be authorized?

We are proud to be part of the Seabees, and would consider it an honor to wear the insignie. In all probability, there are many other Seabees who feel the same way we do.—E. G. S., SV3, USN.

• *You have a right to be proud of the Seabees. They became famous during World War II for their almost unbelievable construction feats.*

The Seabees, together with certain other groups, were authorized to wear a special shoulder insignie during World War II. Groups authorized to wear special insignia were assigned to especially dangerous duty. An example of another group who wore a special insignie is PT boat personnel. If men were transferred from this type duty, however, they were required to remove the insignie.

After the war ended, and the "especially dangerous duty" ended, the need for the insignie no longer existed. It was abolished in January 1947. There are no plans at present for the reinstatement of the Seabee insignie.—Ed.

ever. When Seavey started, a little over a year ago, men were brought ashore who had gone to sea as far back as 1939. That's where the problem of longer time at sea versus longer time in the Navy was important. But most of these men are now ashore. This leaves only those men with approximately the same amount of sea duty eligible to come ashore.

Here's how Seavey works. When you have met all the requirements for shore duty—both sea duty and obligated service—your name is placed on the active Seavey list to come ashore. This list is by name, with the man having the most time in the Navy listed first. (Remember, in this example they all have about the same amount of sea duty.) Now, from this list a man is assigned shore duty, taking into consideration besides his length of service, his career history and duty preferences.

Career history is an important aspect of Seavey. One man may have been assigned to a ship that rarely leaves port, while another has been on board one that has bounced all over the world. Now, don't you think the man in the sea-going ship deserves to come ashore first, even though he may have a shorter time at sea? There could be a dozen other examples of how career history could also be the deciding factor if all else were equal.

In other words there might be a very good reason why the man with a shorter time at sea should come ashore first.

But let's get back to the length of time at sea versus the length of time in the Navy. First of all, we have to remember this: Seavey is new (Shorvey has been in operation for a few years.) Until Seavey has operated a few years more, there are bound to be problems. But is this matter of sea-time versus Navy-time a problem? We don't think so.

The program is basically set up for the career man; to give him a minimum

Seeing America En Route

SIR: Where can I find the authority to travel by private car from Panama to my next post in the U. S.? By traveling in this manner, it would not only afford me the opportunity of seeing portions of Central America and Mexico, but, I believe, it would be a saving to the government.—M. C. C., ATC, USN.

• We broke the book out on this one. Unless your transfer directive states differently, your commanding officer can include in permanent change of station orders authority for you to perform travel by privately owned vehicle. His authority, contained in Art. C-5317 (2)(b) of "BuPers Manual," is also stated in BuPers Inst. 1306.58B, para 9.

All delays en route and travel time in excess of theoretical travel time must be charged as leave.

Reimbursement for travel performed at your own expense will be limited to the amount authorized in "Joint Travel Regulations."—ED.

of 20 years balanced duty, both ashore and at sea. At the start of the program, however, everyone at sea and everyone ashore can not just swap places immediately. It's going to take time before the program settles into a routine.

In the meantime, someone may stay over his tour, while another may leave before his tour ends. The consensus is that the system is basically sound.

To try to see the sense of the program, let's look ahead a few years, when Seavey has aged a little. This many years at sea, then that many years overseas, and then so many years ashore. So long as this system is used for everyone throughout his entire career (not started in the middle of a career when it catches men like your-

self at sea for a considerable time), the man with the longest time in service will be the man who deserves to come ashore.

That's the story of Seavey as it affects your case. We hope it's a little clearer to you than it was before.—ED.

Harry Lee's Decorations

SIR: USS Harry Lee (APA 10) was one of the most active ships in the Amphibious Forces during World War II. I know she fought in both the Atlantic and Pacific, but I am not sure about her medals and citations.

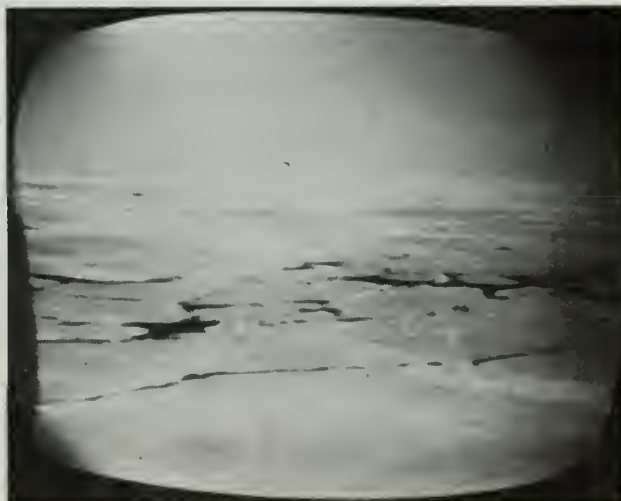
Could you tell me what ones she earned between December 1943 and April 1945?—R.C.R., CS1, USN.

• We would be happy to. Besides the World War II Victory Medal; the Philippine Liberation Ribbon with the bronze star; and the Philippine Republic Presidential Unit Citation, USS Harry Lee (APA 10) earned the Asiatic-Pacific Campaign Medal with six battle stars, and the African-European-Middle Eastern Theater ribbon with one star. The battle stars were earned at Sicily, Gilbert Island, Western New Guinea and Hollandia operations, Marianas and Guam, Luzon and Lingayen Gulf, and Iwo Jima.

We don't feel that just listing these medals tells the whole story of Harry Lee. We should like to go into a little more detail, and tell you the wartime story of Harry Lee (APA 10).

Named for Major General Harry Lee, USMC, the ship was originally built as the luxury liner SS Exochorda. She was later purchased by the Navy and converted to an attack transport at Hoboken, N. J. On 27 Dec 1940, she was commissioned USS Harry Lee.

She immediately started to practice her chosen profession; amphibious landings. As an armed combat transport, she carried Marine combat teams from Norfolk, Va., to Guantanamo Bay, Cuba, and then to Culebra, Virgin Islands, for



CHANNEL I-C-E- — Television taken aloft by copter is being tested by the Navy for its value in ice recon work.



HEAVE HO—Pacific fleet destroyer USS BLUE (DD 744) makes ready to berth at pier as heaving line is tossed out to their dockhands.

participation in Fleet landing exercises.

After this, she returned for an overhaul and repair period before proceeding to Hilton Head, S. C., for more landing exercises. A change of pace was then in store for Harry Lee, however, as she returned to Norfolk, Va., to embark Marines and supplies for Reykjavik, Iceland. After delivering the cargo of men and supplies, she headed toward Norfolk for a repeat performance of the Iceland trip. A breakdown en route forced her to put in at Halifax, Nova Scotia, and a few days later she steamed for Boston to undergo repairs.



CROSS-EYED—Marine Corps HR2S-1 helicopter is guided down. Pupils of eyes on copter are air intake vents. The whites are the squadron's own touch.

Repairs completed, Harry Lee headed for Norfolk, arriving there on 24 Feb 1942. A week later "Harry" was off to Bermuda; but it was a short mission and she was soon back at Norfolk to load troops for practice landings in the Chesapeake Bay area. The next several months were spent maneuvering in the Chesapeake with other transports, warships and amphibious ships in preparation for the invasion of North Africa.

Maneuvers completed, the training ships ceased operations and departed for Norfolk and other ports to embark combat troops. But it was not in the books for "Harry" to go to North Africa. This time her engines broke down and she had to be towed into Norfolk. While in the Navy Yard, Harry Lee lost part of her crew. With well trained officers and men so vital, 75 per cent of the officers and 25 per cent of the enlisted men aboard were transferred to another ship. Harry Lee, a ship that had trained for months to be part of the invasion of North Africa, was sidelined because of injuries.

On 8 Dec 1942 she received orders to return to her old job of training amphibious troops in the Chesapeake Bay area. In early April 1943, Harry Lee left her training duties and went to the Brooklyn Navy Yard to get additional armament.

On 8 June, after loading combat troops and supplies, she was en route with other amphibious transports, cruisers and destroyers, for the war zone—namely the Mediterranean.

On 10 Jul 1943, Harry Lee took part in her first actual operation. She landed troops and cargo through the heavy surf at Scoglotti on the southeast coast of Sicily. Eight of her crew were wounded in this crucial operation.

Following the Sicilian operation, Harry Lee returned to the United States with a cargo of German prisoners. From there, she changed oceans. She passed through the Panama Canal on 31 August, and after loading cargo at San Francisco, proceeded to Honolulu.

After Hawaii, she was off to Wellington, N. Z., where she took aboard part of the Second Marine Division and departed for a rendezvous at Efate in the New Hebrides Islands. From there she sailed for her first landing operation in the Pacific — Tarawa, 20 Nov 1943.

From Tarawa, it was back to Pearl Harbor for more exercises. After two weeks of dummy runs and mock invasions, she put to sea. Nine days later, on 3 Jan 1944, she put troops and equipment ashore on Kwajalein atoll in the Marshalls.

On 5 February she went to Funafuti in the Ellice Islands, and then to Noumea, New Caledonia, arriving there on 24 Feb 1944.

After more maneuvers at Guadalcanal, she made trips to Bougainville, then through the China Straits to Milne Bay, New Guinea, and on to Cape Sudest and Dreggar Harbor, New Guinea.

On 19 April Harry Lee, in company with elements of the First Eastern Reinforcement Group, entered Berlin harbor, Aitape, Dutch New Guinea, to land her troops and cargo. Although the sea was calm, the heavy surf took its toll of four landing boats.

After a refueling stop at Cape Endiadere, Buna, Harry Lee moved to New Guinea where she loaded cargo and embarked troops for Aitape. After debarking the troops, she headed for Espiritu Santo for eight days in dry dock.

After a bit more practice, Harry Lee sailed with a large task force en route for Guam. The operation plan called for a landing on Saipan, closely followed by one on Guam. Harry Lee was held for the Guam landing.

On 21 Jul 1944, ship-to-shore operations began at Guam. Weather conditions were ideal and opposition was light. After four days, Harry Lee was headed for Pearl Harbor. From there she sailed to the States for overhaul.

After a two-month overhaul, she again headed for the Pacific war zone. Her next task, after more exercises, was putting supplies ashore at Lingayan Gulf, Philippines. The first attempt was unsuccessful. The heavy surf prevented the small boats from going in, and Japanese planes were constantly attacking the task force. After staying at General Quarters during the entire day, Harry Lee received orders to leave the area. The following day, however, she got permission to return. This time she successfully put her cargo ashore and left the area for Leyte Gulf.

The next big operation for Harry Lee was Iwo Jima. She was in the area for

18 days. After she put her troops ashore at various points of the island, Harry Lee took on a new job — that of hospital evacuation ship. Over 350 casualties were taken aboard and transported to the Advanced Naval Hospital, Saipan. Harry Lee then returned to Guam.

Iwo Jima was the last wartime operation for "Harry." After several routine trips around the Pacific, Harry Lee was ordered to the United States. After an abbreviated stay on the West Coast, she headed for Japan. Japan had just surrendered and Harry Lee was soon sailing in the waters of Tokyo Bay. She debarked troops at Yokohama, and then embarked returning "high point" servicemen. After a short stop at Pearl Harbor, Harry Lee returned to the States.

After another trip to the Philippines, she went to Norfolk, Va., for a yard period. Then, on 9 May 1946, Harry Lee hung up her boats. She was decommissioned at Brooklyn Navy Yard.—ED.

Overseas Duty and Dependents

SIR: Is it still possible for a chief with six dependents to get overseas shore duty?

I was told that CPOs with more than three dependents (a wife and two dependent children) are not being given such assignments.

Is there a BuPers Instruction on this? —R. A. H., BTC, USN.

• Sorry, but you're probably out of luck.

Under BuPers Inst. 1306.6B a CPO with more than three dependents, a PO1 with more than two, a PO2 with more than one or a PO3 or lower with any dependents is not authorized to apply for overseas shore duty under BuPers control (MAAGS, missions and such). SERVLANT and EPDOPAC (Enlisted Personnel Distribution Office of the Pacific Fleet) usually apply similar dependency limitations in making assignments to overseas shore duty not under BuPers control.

The problems involved in providing dependents with housing, schooling, medical facilities, transportation and evacuation in case of emergency are some of the main reasons for trying to limit the number of dependents going overseas.—ED.

Pro Pay Exams

SIR: Persons who competed in the November proficiency pay examinations used examinations for advancement to the next higher pay grade.

BuPers Instruction 1430.7C states that to be eligible for participation in service-wide examinations for advancement in rating, each candidate must not have competed in a service-wide examination for advancement held three months before.

If a petty officer took the examination for "Pro" pay in November, is he eligible to take the service-wide examination for

advancement in rating in February 1959?—P.E.B., PNC, USN, and R.M.G., PN1, USN.

• The proficiency pay examination is separate and distinct from the advancement examination. Therefore, personnel who took the proficiency pay examination in November, may take the advancement examination in February, if eligible and recommended.—ED.

Navy's Only Shellbackwards

SIR: As happy as we were to find ourselves present and accounted for on page 41 of your August issue, we couldn't help but groan at seeing our "first" wrongly reported as a mere triple crossing of the Equator and International Dateline.

You said, "uss Menhaden (SS 377) crossed the International Dateline at the Equator (Latitude 00-00, Longitude 180-00 East and West) then backed down and repeated the performance."

You overlooked the fact that in backing down we became (so far as we know) the first and only submarine in history to cross under both those lines at the same time WHILE SNORKELING BACKWARDS.—The Golden Shellback(wards) Snorkelers of uss Menhaden.

• Fine. Now let's hear from the crew that's done this before.—ED.

Two Ships Called Evans

SIR: I served in uss Evans (DD 552) during World War II. I noted in a recent issue of ALL HANDS a picture of uss Evans (DE 1023). Is it possible that two ships have identical names, or has the old Evans been disposed of?—J.F.S., ex-USN.

• It is not possible for two Navy ships

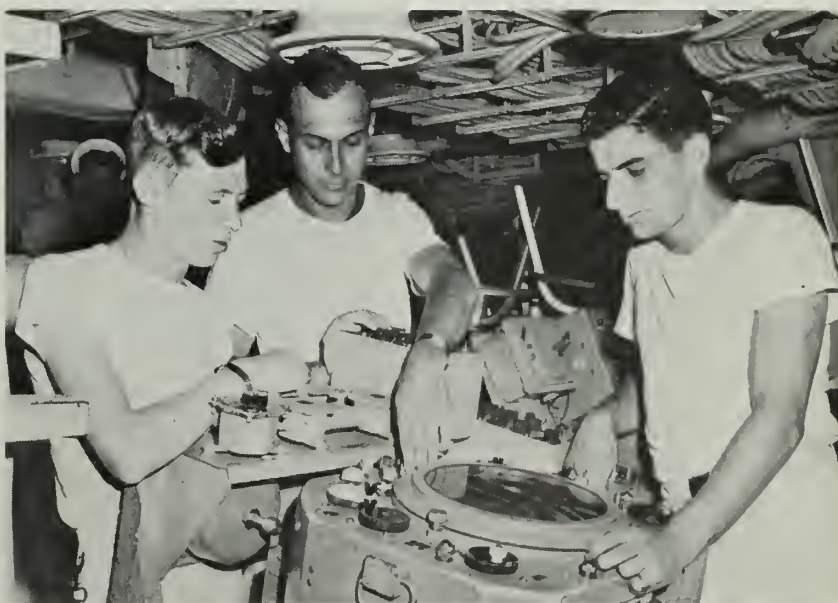


JAPANESE FLOWER girls express appreciation for concert of American music played by Seventh Fleet Band.

in commission to have identical names. Many times, however, newly commissioned ships are given names of ships that are no longer in commission.

In this particular case, the name of DE 1023 is the same as that of DD 552; but they were not named for the same man. DD 552 was commissioned on 11 Dec 1943 and named for Rear Admiral Robley D. Evans. The new DE 1023 was named for CDR Ernest Edwin Evans, USN, CO of uss Johnston (DD 557), who lost his life in the Battle for Leyte Gulf on 25 Oct 1944.

uss Evans (DD 552) was sold in 1947. uss Evans (DE 1023) was delivered to the Navy on 21 May 1957.—ED.



SHOWING THE WAY—A radarman on board USS Northampton (CLC 1) passes word on operation of a repeater to two RD strikers during operation.



Old Salt Pipes Up with Account of Way Back When

SIR: While rummaging through my souvenirs I came across a letter on page 53 of the July 1958 *ALL HANDS* about using a bosun's chorus when setting the first watch at a commissioning ceremony.

So, I ambled down the beach a way and showed your piece to Captain Mossbottom of the *Olde Nayvee*. At first he muttered, then he sputtered—and I thought he'd blow a gasket and break his dentures the way he chomped down on his pipe.

"Why, rattle my ratlines!" he fumed, "young feller that wrote that piece must be as seagoin' as a combine in the wheat fields of Kansas. Guess I must'a wrung out more salt water from my socks than he's ever sailed on."

"The way he wrote it, you'd think the watch was set only when the ship was commissioned. Why, every sailor worth his salt knows that we set it every day. Yesiree, we always had PORT watch and STARBOARD watch routine in our ships, and the watches ran from eight o'clock one night right through to eight o'clock the next. During the day we'd relieve the watch, but every night we set it."

"Listen, sonny, when you get home, you sit right down and write to that young feller to put him straight, will you?"

"And another thing, they didn't set it the way he wrote it at all. He's got his punctuation marks all gebollixed up. The Chief Bosun and all his gang would gather together up on deck for eight bells to go, and then they'd all pipe in a chorus like this, see?"

At that the old codger reached into his breast pocket to pull out his bosun's pipe, flicked a couple of barnacles off his chin with it—and then let go with a long, shrill pipe as if he were piping the President of the United States himself along-

side the flagship. It was so clear and drawn out that it started the jay-birds on the other side of the ridge a-fighting among themselves.

"Then after they'd piped together, they'd all scatter fore and aft top-side to pass the word, which went, 'SET [then softer] the watch!'"

There was a short pause while he caught his breath, and then he drawled out slowly and softly, "On deck," and then—BANGO! he roared,—"FIRST section!"

The way he bore down on that last part of it made the running light oil lamps outside his front door shake and the glasses in his sideboard jiggle up and down.

With that performance behind him, he leaned back again and told me, "Now you go on home, Sonny, and write 'n tell that young writer-feller how we did it in the *Olde Navyee*."

I promised old Captain Mossbottom that I'd let you know how he felt about the matter, so there you have it.—Isaiah Olch, CAPT, USN (Ret).

• *Good old Captain Mossbottom! Last we heard of him was that time he tried to round the Horn with a circular saw.*

As we interpret his message (after shaking off some of the salt), he claims we said the watch is set only when a ship is commissioned.

If he'll scrape some of the spray and barnacles off his bifocals and take another look at the letter in question, he'll find we didn't say any such thing. We were merely talking about the way the first watch is set at a commissioning ceremony. Our answer was based on information put out by the Fifth Naval District, and since that district includes Norfolk, Va., we believe they should know quite a bit about commissionings.

Incidentally, the young writer feller you speak about happens to be from Kansas.—Ed.

BuPers Inst. 1440.5B, which covers changes made for the convenience of the individual. Under this instruction a man must qualify through his own efforts by completing required training courses and practical factors and then successfully completing the service-wide exam for the requested rating.

Good luck.—Ed.

Chetco with Get-Up-and-Go

SIR: In your September 1958 issue you carried one letter from *uss Yuma* (ATF 94), claiming a record for tons towed during a five-and-one-half month period, and another from *uss Salish* (ATA 187), claiming most miles steamed in a month.

To an ex-tug-skipper these items were most interesting. They also revived a question in my mind which perhaps some of the old tug sailors can answer.

In 1943 *uss Chetco* (ATO 166) made her shakedown cruise from Galveston, Tex., to Brisbane, Australia, with three tows. She made brief stops at Panama and Noumea, New Caledonia. Total distance was about 9500 miles and required 84 days underway. The leg between Panama and Noumea was 7200 miles, and was made non-stop in 65 days. Fuel was obtained from the tow.

We of *Chetco* were always quite proud of this cruise, and believe it may have set some sort of record for Navy tugs.

Can anyone top the 9500-mile trip, 7200 miles between ports and 65 consecutive days underway with tow?—R. E. Gill, CDR, USN.

• *Offhand, we don't know whether or not any of those figures represent records. But, we're pretty sure the tugs are way out front when it comes to the number of Figure Filberts per square inch.*

*You can rest assured that these seagoing statisticians will let us know if *Chetco* takes the cake.—Ed.*

Photo Intelligenceman

SIR: I am an MMI with a job code of 9961 (Radar Intelligence Technician) assigned to a Photo Interpretation office as a Photo Intelligenceman. That introduction taken care of, I would like to ask: (1), What is the required sea duty before applying for shore duty? (2), What is the required sea duty for a Photo Intelligenceman, first class? and (3), How long must I be aboard and what is the procedure for requesting duty with a squadron?—P. D. S., MMI, USN.

• *Your sea duty commencement date determines your eligibility for rotation to shore duty under Seavey. This is regardless of whether or not you hold a special program code. In your case, as with all other MMIs, if you started sea duty on or before May 1953, you are eligible for the current Seavey.*

How to Change in Rating

SIR: I would like to change to one of the more technical ratings. How do I go about it?—P. H. M., SH3, USN.

• *There are two ways you can do it.*

One is through the formal conversion program under BuPers Inst. 1440.18B. This involves a course of instruction at Class A and/or B schools, or in-service

training leading to a change in rating. The program is designed to fill shortages in ratings where people are needed and to cut down on the overcrowding in other ratings. (To qualify for conversion school, your marks in the Navy basic battery classification tests will have to meet certain minimums.)

Your other possibility is outlined in

Sea tours have not yet been established for the rating of Photographic Intelligenceman because it is a new rating. However, the average minimum sea tour under Seavey is never less than three years.

Since you are in the Pacific, you may submit a request for change of duty to other sea duty (such as an aircraft squadron) via the chain of command, to CO EPDOPAC in accordance with CINCPACFLT Inst. 1306.7—Ed.

Hornet's End

SIR: The February 1958 issue of ALL HANDS carried the article, "A Nest of Hornets." On Page 20 it stated, "In October of that year (1942), *Hornet* carried on a tradition of her forebears. No *Hornet* had ever been sunk or captured by an enemy."

I'm a little confused since the book, *The United States and World Sea Power* edited by E. B. Potter, 1955 edition, page 733, paragraph 4, states, "Left thus without fighter cover, the *Hornet* became the target of repeated afternoon air attacks. When another torpedo and two more bomb hits made her blaze afresh and heel over dangerously, the force commander ordered the carrier abandoned. He then withdrew, leaving two destroyers behind to sink her. These expended all their torpedoes and more than 400 shells without producing any effect except to start new fires. After dark, when the American destroyers had departed, ships of Kondo's fleet approached the burning derelict. Unable to take her in tow, they sent her down with four Long Lances."

It would be greatly appreciated if you could give me the correct answers pertaining to these articles. Did Kondo's fleet really sink *Hornet* (CV 8) or has there ever been a *Hornet* ship sunk by the enemy?—G. C. M., PHAN, USN.

Ship Reunions

News of reunions of ships and organizations will be carried in this column from time to time. In planning a reunion, best results will be obtained by notifying the Editor, ALL HANDS Magazine, Room 1809, Bureau of Naval Personnel, Navy Department, Washington 25, D. C., four months in advance.

• *16th Seabees*—The seventh reunion will be held 9-12 July at the Lafayette Hotel, Long Beach, California. For details, write to Arnold Siita, 16th Seabee Association, 1246 Addison St., Berkeley 2, California.

• *uss Stafford* (DE 411)—All former members who served on board from May 1944 until decommissioning, and who are interested in holding a reunion with time and place to be decided by mutual consent, may write to Elias Lipschutz, 119 Saranac St., Rochester 21, New York.

• *Several histories, including the history of uss Hornet (CV 8), published by the Ship's Histories Section before 1950, state the following: "After other vessels had rescued all but 129 of her complement of 2900 men, two destroyers were ordered to sink her. This they did with torpedoes and shells. As dusk crept over the South Pacific, Hornet slid beneath the surface."*

The Ship's Histories Section tells what actually happened: "The destroyers uss Anderson (DD-411) and Mustin (DD-413) fired torpedoes and shells into Hornet. By 2040 on 26 October, Hornet was aflame and in a sinking condition. Two Japanese destroyers (Makigumo and Akigumo) arrived later. Unable to take Hornet in tow, they sank Hornet at 0135, 27 October with four big Japanese '24' fish."

The aircraft carrier *Hornet* is the same one that was used as a springboard for LTCEN (then BRIGEN) Jimmy Doolittle's famous raid on the Japanese mainland in 1942.

She was sunk after being under attack for 10 hours in the Battle of Santa Cruz.—Ed.

Honors to Arizona

SIR: One afternoon I sat reading a back issue of ALL HANDS (Oct 1957) and came upon a letter to the editor about *uss Arizona* (BB 39). Written by F. E. Bailey, CHBOSN, USN, it suggested that ships going by should start a tradition by rendering passing honors to Arizona and her silent crew.

Can you tell me whatever became of the idea contained in CHBOSN Bailey's beautifully written letter?—J. A. Mauro, YN3, USN.

• Evidently you didn't see the February or June 1958 issues of ALL HANDS.

In the February issue there were numerous letters from Navymen who pointed out that their ships always rendered honors when passing Arizona. In June we published a letter from a member of the Signal Gang at the Pearl Harbor Signal Tower. He too said that passing honors were already being rendered.

So, it would seem that, along with CHBOSN Bailey, there were a sizable number of Navymen who already felt that passing honors should be rendered to Arizona, and many ships have been carrying on this practice for years.

It isn't necessary to pass by Arizona to show remembrance of her and her men. The Navy is authorized to accept contributions to raise \$500,000 for the construction of a memorial and museum to be located on or near Arizona's hulk. Contributions may be mailed directly to *uss Arizona Memorial*, Pearl Harbor, T. H.—Ed.

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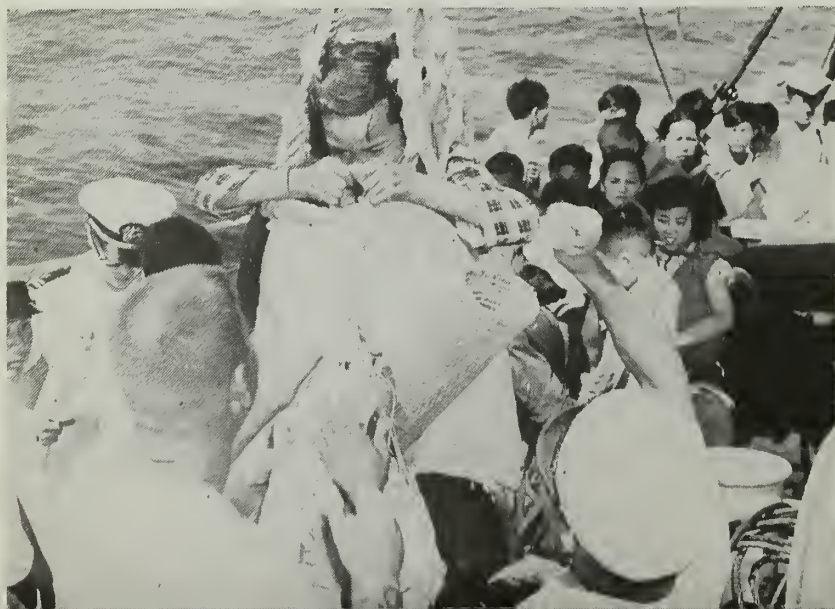
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NAVY COPTER picks up passengers from SS Hoi Wong. Right: Chief offers ice cream to girls aboard USS Helena (CA 75).



HELPING HANDS—VADM F. N. Kivette, Comdr. 7th Fleet, helps woman and child board flagship. Below: Chinese arrive from Hoi Wong by breeches buoy.



Helena Puts on 116 More Plates

IT'S NOT OFTEN that a ship at sea gets unexpected dinner guests. Recently, however, *uss Helena* (CA 75), flagship of the Commander, U.S. Seventh Fleet, in the Far East, had to make room for 116 extra persons for dinner.

The 116 guests were rescued from a Norwegian merchant ship, *Hoi Wong*, which had gone aground on Bombay reef in the Paracel Islands.

Two days before the rescue, *Helena* had been in the vicinity of the Philippine Islands taking part in a routine exercise. *Hoi Wong*, loaded mostly with Chinese families who had been visiting friends and relatives in Red China, was en route from Swatow, Kwangtung Province in Red China, to Singapore.

After the Norwegian ship went aground, two tugs from Hong Kong

came to the rescue. They tried unsuccessfully to refloat the stricken ship. A passing cargo ship tried to take the passengers off in small boats; but the unusually high ground swells prevented the boats from even getting close.

A call was put out to the U.S. Navy. *Helena* answered the distress call, and steamed at flank speed all night. When she reached the freighter, she also tried to reach the passengers by small boat. The sea was still too rough, however, and the boats returned to the ship. Two helicopters from *Helena* started an immediate rescue. Every passenger, including 48 women, 22 children, and 46 men, was brought safely aboard.

Everything was ready on the flagship for the unexpected guests. It was 1630, so food was the first thing. After dinner, the guests were invited to use the soda fountain and the movie hall. The Seventh Fleet Band furnished music for the visitors.

Helena headed for Hong Kong to debark the guests. Every person was made an honorary crew member of the ship and invited back aboard should *Helena* ever visit their home city.

For displaying "skill and courage in carrying out a difficult humanitarian mission with efficiency and complete safety," Admiral H. H. Hopwood, CINCPACFLT, gave the ship a "Well Done." He also gave "special kudos to helicopter pilots and crews for a magnificent job."

ALL HANDS



TYPHOON VICTIMS sort clothing donated stricken area by Yokosuka personnel.

Florikan Lends a Helping Hand

FLOOD AND TYPHOON victims of Shizuoka Prefecture living near the Izu Peninsula city of Numazu are now wearing clothing and sleeping on mattresses donated by personnel of U. S. Fleet Activities, Yokosuka, Japan.

The welcome and much needed articles were rushed to the typhoon-devastated area from Yokosuka by submarine rescue vessel *USS Florikan* (ASR 9). Altogether she carried 121 boxes of clothing, 11 boxes of food and 300 mattresses. The Numazu vice-mayor was surveying the disaster area when the Navy arrived with the goods. He expressed appreciation for "the kindness of United States Navy personnel to Japanese sufferers."

The relief goods were collected during a special drive at Yokosuka and included donations from the Naval Air Facility at Oppama, as well as contributions from units of the Seventh Fleet that were in the port.

On arriving at Numazu *USS Florikan* had to anchor 500 yards off shore because of the harbor's shallow mouth. One Navy small boat working with two Japanese launches carried the supplies to the pier. From there they were taken five miles to where the Typhoon Relief Center had been established.

The most needed objects were the mattresses. One nearby villager who was among the first group to receive the Navy aid put it this way. "Everything was washed away. We are most happy to have the mattresses

to keep our children warm."

The area that Yokosuka sent the aid to was one of the hardest hit on the Izu Peninsula. Crew members of *Florikan* saw mud and debris from destroyed homes still covering yards and rice fields. Many houses were still under water. An estimated 651 persons were killed in Shizuoka Prefecture during the typhoon, 223 are still missing and 373 were injured.

The crew of the relief ship made their own personal donation. During the trip from Yokosuka to Numazu her 93 men donated 57,000 yen which was earmarked for distribution to school children to buy books, pencils and paper.

—By Dale A. Burk, JO2, USN

—Photos by John C. Reed, PH2, USN



JAPANESE woman receives mattress.

Below: *USS Florikan* unloads supplies.



RELIEF SHIP TOO—Crew of *USS Florikan* (ASR 9) line up as their skipper presents ship's donation of yens for school supplies to the mayor of Numazu.



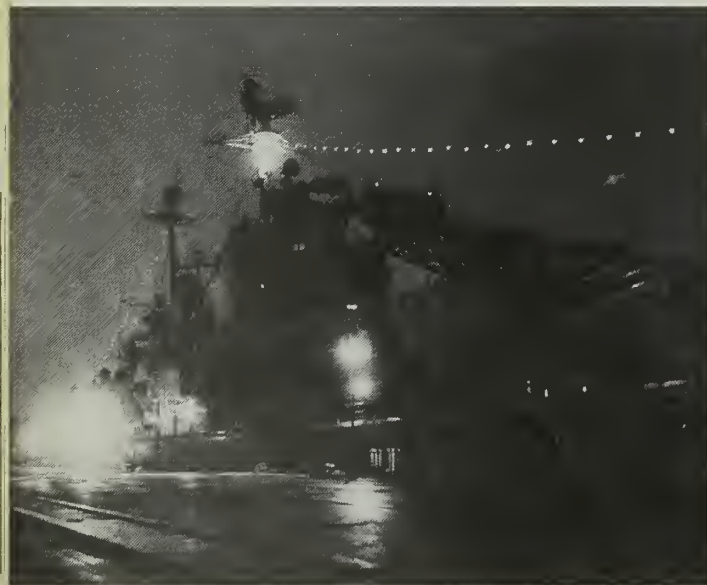
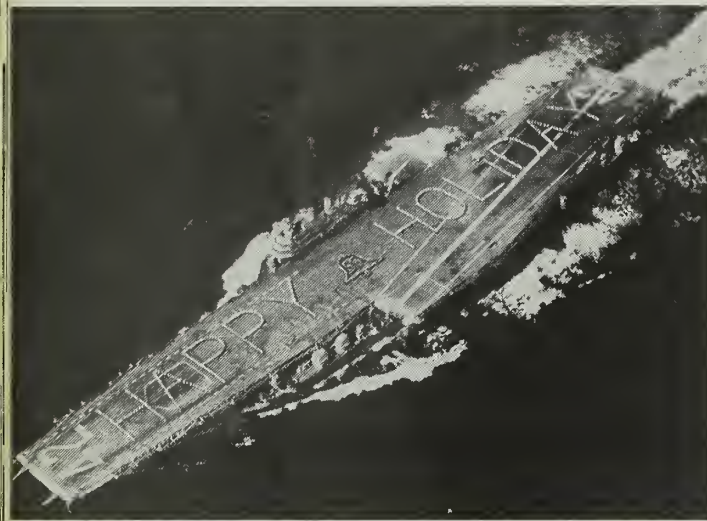


Merry Christmas

ON BOARD ships, in ports throughout the world, and at shore establishments here and abroad Navymen will celebrate the 1958 Yuletide season in traditional Navy style.

Superstructures take on a celebrative glow as lights and decorations are rigged. Christmas trees sprout through steel decks. Carols and chimes resound from Navy chapels and from shipboard services in tune with the Yuletide. Goodwill flows even stronger as Navy-men spread the spirit of Christmas to people of the world by playing the part of salty Santas to many who would otherwise have been forgotten.

Ships will swarm with joyous orphans; trips inland will take food and clothing to many of the world's needy. Here is but a small pictorial sample of the holiday spirit spread by the men of the Navy.





from the Fleet

Clockwise from top left: White Christmas is a sure thing for Navymen stationed in such frigid places as Antarctica. (2) Big day will come for many orphans the world over when sailors exchange Navy Blue for Santa-red uniforms. (3) Ship and shore stations play host to small fry every Christmas. (4) Who knows, in some ports Santa Claus might sail from under his North Pole home and arrive by submarine. (5) Throughout the Fleet the real meaning of Christmas is kept in mind as Navy chaplains conduct services. (6) Yuletide glow will brighten many locations on the globe as ships and stations deck themselves out with lights (7) Destroyers at Newport, (8) USS *Canberra* (CAG 2) at Naples, and (9) USS *Toledo* (CA 133) at Yokosuka show festive lights. (10) USS *Franklin D. Roosevelt* (CVA 42) extends a king-size greeting.



★ ★ ★ ★ TODAY'S NAVY ★ ★ ★ ★



COLD FACTS — Veteran icebreaker *USS Burton Island* (AGB 1) has established many firsts while cruising through frozen waters of both polar regions.

ASW Patrol Plane *Electra*

The Navy has awarded a contract for engineering work on the new P3V-1 *Electra* antisubmarine warfare patrol plane.

This land-based bomber—the first Navy antisubmarine warfare plane to be turbine-powered—will eventually replace the P2V *Neptune* series of long-range patrol bombers.

The *Electra* will have four engines that are capable of developing a total of 18,000 hp at takeoff. Although its top operating speed will be more than 460 mph, the Navy's *Electra* will also be capable of flying as slow as 150 knots. Excessive speeds are not required for routine ASW patrol.

Its long range makes it useful for mid-ocean searches. Depending upon its mission, the P3V-1 can fly with complete control at white-cap

level or operate at altitudes above 30,000 feet.

It has short take-off capabilities which permit operations from small advanced bases.

Neptune for Nippon

Following an agreement between the governments of Japan and the United States, the Navy has signed a contract with an aircraft company to permit the Japanese to manufacture the P2V *Neptune*.

Technicians, advice and materials will be made available to the Japanese government.

The planes being built in Japan will be turned over to the Japanese Maritime Self Defense Force. The program is intended not only to provide Japan with planes for their own defense, but also to lend impetus to that nation's aircraft industry.

Friends In Deed

Friendship is expressed in many ways, and Navymen have long been known as friends—especially to those in need. Recently, Navy ships and their crews demonstrated how it is done.

USS Sierra (AD 18) has a touching story to tell. Fifty-three sailors from that AD rolled up their sleeves to make sure that when 2½-year-old Robin Woo of Norfolk, Va., undergoes a delicate heart operation this winter, she will have a good supply of blood in the "bank" to help her.

Sierra men first heard of Robin's plight from her uncle, Robert G. Butler, CS1, who is assigned to *Sierra*. He had told the chaplain of his niece's heart condition and of the coming operation. The chaplain put a notice in the ship's newspaper. He asked for 20 volunteers. Sixty persons volunteered, of whom 53 were accepted as donors.

Those men probably know very little about open-heart-surgery; but in January, when Robin has her operation at Johns Hopkins Hospital, Baltimore, she will have 53 pints of blood and a full complement of prayers from the *Sierra*.

USS Prairie (AD 15) returned to San Diego recently with a gift of friendship from the people of Yokohama, Japan. The gift was a 2¼-ton bronze bell. Cast specially by a Japanese craftsman, the six-foot Buddhist ceremonial bell bears the inscription, "Bell of Friendship, presented to the citizens of San Diego from the citizens of Yokohama as a symbol of eternal friendship, May, 1958." A special bell house will be constructed in San Diego for the bell.

Friendship was expressed by and for men of *USS Ranger* (CVA 61) recently, during a journey around the Horn from Norfolk, Va., to her new home port in California. En route, she made many 'goodwill' port calls, visiting Port of Spain, Trinidad; Rio de Janeiro, Brazil; Callao and Lima, Peru; Valparaiso, Chile; and Acapulco, Mexico. During her visit to Peru, the ship's crew donated more than \$2100 to Lima charities. Races, tours, athletic events and other entertainment were

YESTERDAY'S NAVY



On 8 Dec 1941 the Potomac and Severn River Naval Commands were established. On 21 Dec 1943 naval aircraft from Attu, Aleutian Islands, bombed the Paramushiro-Shimushu area of the Kurile Islands. On 29 Dec 1812 *USS Constitution* defeated the British *Java* in a hard-fought two-and-one-half-hour engagement off Bahia, Brazil. On 30 Dec 1918 U. S. ships in South American waters were ordered to the assistance of some 125,000 people left without shelter by an earthquake that hit Guatemala City, Guatemala, on Christmas Day. On 31 Dec 1862 the original *Monitor* was lost in a gale off Cape Hatteras, N. C.

arranged for the ship in all the countries visited. *Rangermen* did their share to make friends by opening the ship for general visiting, and by providing entertainment for orphans and underprivileged children. The trip around the Horn was not just a pleasure cruise for this first super carrier to be assigned to the Pacific; she was just too wide to go through the Panama Canal.

Target Needed for New Missiles

The Navy and Air Force have started a joint project to obtain a low-cost, high-speed missile target.

They want an air-launched, high-altitude, expendable target for missile-firing fighter and interceptor aircraft. It should be a medium-sized rocket or ramjet-propelled target aircraft with short flight duration. An air turbo-rocket has, however, been considered. The two services have turned to manufacturers to find a design that meets jet age needs.

Air-to-air missile firing practice for pilots and aircraft scheduled for operations in 1961 would be provided by the proposed target.

MarCads Are Back

The Marine Corps will restore Marine Aviation Cadets (MarCads) to its ranks beginning in July 1959.

Since 1941 both the Navy and Marines have made use of the Naval Aviation Cadet program as a source of trained pilots. Before that time, each service had its own program. The reestablishment of MarCads will mean a return to that system.

The Marines will start accepting applications for their program on 1 January. Selected candidates will be appointed Marine Aviation Cadets and will wear Marine Corps officer-style uniforms. They will be given an 18-month course at the Naval Air Training Command, Pensacola, Fla. Upon completion of the training, identical to that given Naval Aviation Cadets, they will be commissioned second lieutenants.

To qualify for the program, a candidate must be a physically qualified male citizen of unquestioned moral integrity, be at least 18 and under 25 years old upon application, have attended college for at least two years and be unmarried and agree to remain so until commissioned. (The college requirement may be waived for enlisted Marines on active duty who qualify through examination.)

In addition, the candidate must: Sign a contract to serve at least three years on active duty after he completes his training; be highly motivated to fly; and not have failed flight training before because of flight deficiency.

Kicking Up a Splash

Whenever you hear the word "rodeo" the chances are that your imagination flashes pictures of bucking broncos, wild steers and dusty corrals. To the men of Landing Ship Squadron Three it carries a different connotation. To them it means shoals of LCVPs splashing madly in San Diego Bay.

The LCVP rodeo is a competitive training device that was set up to keep the already experienced assault boat crews of the Squadron's tank landing ships in combat readiness.

Here's what happens during a typical LCVP Rodeo Day: It starts at 0815 when the boat crew is inspected in whites for neatness and military bearing. At 0845 the boat is inspected for paint, condition, fire extinguisher, battle lantern, running lights, and ramp equipment.

At 0915 the boat crew shifts to dungarees and the LCVP is lowered into the water from the davits. The boat crew is quizzed on the operation of the davits, and the safety precautions necessary for safe handling of the boat in the davits.

At 0930, the boat is started. It clears the ship and begins circling in company with a competitive LCVP. The boat engineer is questioned on the engine, with typical questions such as: "How do you make a 'jump connection' to start a cold engine?" "What are the capacities of the fuel tanks?" "What are the daily check points on the



PORT SIDE—Deck gang of USS Des Moines (CA 134) takes a strain on a line while moored in Grand Canal.

motor?" "How do the bilge pumps operate?"

At 1000 the coxswain is drilled on hand signals and Rules of the Road. The boat is then taken to the Bay side of the Silver Strand for beaching exercises.

The LCVP beaches several times around 1030, backing off under its own power. Then a simulated engine failure takes place with another LCVP pulling the boat off the beach, stern to stern.

At 1100 the boats return to the Bay where towing drills are conducted. Then they return to their respective ships.

All in all, that is a good day's work-out for any boat crew.

PLEASING EYEFUL—Pacific Fleet Service Force Tanker USS Genesee (AOG 8) makes a pretty sight as she steams through Hawaiian waters near Pearl Harbor.



Tractor Train Breaks Record

In temperatures ranging from nine to 24 degrees below zero, 19 Navy-men brought the heaviest tractor train in Antarctic history to Byrd Station from Little America.

Although faced with setbacks because of storms, Antarctic whiteouts, fires, and equipment breakdowns, all nine vehicles with their 16 sleds of cargo and living quarters were driven safely to their destination, over 650 miles of a flag-marked trail. It took them 17½ days to complete the journey.

The train, carrying 127,000 pounds more than any of its predecessors, contained scientific equipment and other supplies which will be needed for completion of the IGY program—which ends this year—and the first year of the forthcoming U. S. Antarctic Research Program.

In addition to serving as a cargo carrier, the tractor train was also of great value to the IGY Antarctic Meteorological Program. Train members radioed back daily temperature reports, wind direction observations and reports on clouds. Meteorologists at Little America considered this information vital as it is the only opportunity they have during the year to record reports for the area between Little America and Byrd Station.

The eight D-8 tractors and one *Weasel* equipped with a crevasse detector which made up the train, were led by LT T. K. Jones, CEC, USN. The 19 men assigned to the tractor train will remain at Byrd Station until air drop missions from NAF McMurdo Sound have been completed, so they can aid in retrieving pallets which are sometimes blown by the wind as far as 30 miles from the drop area.

Right Foot Forward

By taking first place in Santa Clara County's Columbus Day Parade, the Electronics School Drill Team at the Naval Schools Command, Naval Station, Treasure Island, San Francisco, once again showed its championship ability by out-marching even the State "Champs"—the Marines.

The Class "A" ET School team had lost the California State Open Field Championship for Military Drill Teams by two points to the Marine Corps Drill Team just seven days before. In the annual parade,

however, the 10-member Navy drill team made an about face to outmaneuver the new state champions and take the honors.

This is only the second year the members of the ET school group have lost in state championship competition. Although they did not enter last year, they have held the state title five times since 1951.

Under the leadership of Warrant Officer R. H. Dodge, Officer-in-Charge, Third Phase Electronics Technician Class "A" School, the military marching unit receives over 100 invitations a year to appear in parades, fairs, civic events and half-time ceremonies at local college football games.

They have won 150 first place

If You Have the New Year's Mid-watch

Although the book (Article B 3301, *BuPers Manual*) says that ship's logs are for "Official Use Only," the red tape barrier has once again been broken—through proper security channels, of course—in an effort to encourage the continuance of the fine old custom of using poetry (or at least rhyme) in writing up the ship's log during the mid-watch on New Year's Day.

If your ship has already published its watch list for 1 Jan 1959, and if you are being accorded the privilege of writing up the log, you should bear in mind that you are not permitted any relaxation of the rigid rules for writing the watch report. New Year's Day or not, you must still comply with *Navy Regs*, Article 1037, which spells out the do's and don'ts of maintaining the deck log.

If you are going to have this distinct honor, put on your thinking cap and be prepared to tell, in poetry, the required details about your ship. They should include the particulars about mooring lines, ships present, senior officer present afloat, sources of electric power, steam and water, as well as many other bits of useful information.

After penning your literary efforts, make a copy for us, and if it's worth its weight in salt, we'll see what we can do with it—security permitting, of course.

Here are a few mid-watch entries, which we think are worth passing on to you. Can you top them?

USS BLAIR (DER 147)

*Moored we are to pier west-ten,
With a crew of salty stalwart
men,
Secured with standard lines of
hemp,
As we watch our pressure,
clouds and temp.
Our lines are doubled except
for two,*

*Which single lies under
midnight blue.
We stand secure against the blast,
With four strong wires to the
pier made fast.
In our fine ship our plant is cold,
But with a watch it is
patrolled.
Bravo is set throughout the ship,
And our in-port watch won't
let it slip.
We've ships around, both far
and near,
They're tankers, destroyers, and
a cruiser here,
All manned by crews of sturdy tars,
Who fear not "saucers" or men
from Mars.
The Atlantic Fleet shows its
mighty share,
And dwarfs our little sturdy
Blair.
And across the stream, mid
shadows gray,
Some mothballed ships gently
sway.
Proud ships at rest after war
weary years,
Their glory at peace, as they
lie at their piers.
The old and the new of old
Boston town,
Look down upon us in a cold
winter frown.
And the shipyard at Charlestown
where snugly we lie,
Is quiet and cold 'neath the
bleak winter sky.
COMIDESRON 14 is the senior afloat,
His pennant's in Lawe; they
care for his boat.
And we with our ship, this old
modern Blair,
Soon home to the sea we must
quickly repair.
Anou we leave this cold bleak place
To sunnier clime our path we'll
trace.
In another port our lines we'll
twine,
In milder place, mid weather
fine.*

trophies in state-wide competition, and have made guest television appearances on nationwide shows.

Participation in the drill team is a spare-time activity sandwiched into a student's 26 weeks of study. Serving on the drill team must not interfere with military or classroom obligations. Thus, members must sacrifice many hours of liberty to

maintain their marching precision.

New members are taken into the squad slowly. First, the new member is placed in the "awkward squad" where he takes care of the unit's extra equipment when they parade. Later, he is taken in as an apprentice and then into full membership on the drill team.

Only one higher honor can come

to a member—that of "team card." This honor is given to a graduate member who can march in any position on the team. His skill is important in determining the unit's position.

During nine years of competition, the Electronics School Drill Team has defeated every major drill team in the state of California.

Take Your Cue from These Samples of Writing the Ship's Log

But before we go and drop out of view.

Farewell to the old year; all hail to the new.

—H. W. Kinsley, Jr., LT, USNR.

USS WILHOITE (DER 397)

*Moored portside to Pier Ninety-one
The place is Seattle, Washington.*

Berth "Alfa" is the selected spot

To which our lines are tethered taut,

And nestled to our starboard breast

*Are USS Vance and Lowe, no less,
Sister ships of the Vigilance*

Squadron,

Friends in duty to rely upon.

*Steam for the warmth of our souls
From Number One boiler*

steadily flows;

*Water from streams, crystal clear,
Cascades down from mountains*

near,

And wends its way through canvas hose

To fill our vital water holds.

When a ringing sounds on the quarterdeck,

Messages come from the world direct.

Our hungry lights and motors receive

Electrons from shore plants for their needs;

Modified condition "Yoke" is set

To protect from flooding below the decks.

The sounding and security watch never rests—

All decks echo with his steps;

Number Two generator and

Number Two boiler,

For reason of maintenance, are out of order;

When such work is completely done,

Wilhoite's machinery will buzz and hum.

Other ships berthed around the pier

Sail the Pacific both far and near.

District craft await nearby,

Ready on the instant to their duty to fly.

SOPA, with us, his confidence rests,

He's COMCORTON 5, and the very best!

The night is clear, the watch is set

And one more duty we perform yet.

To our shipmates we say:

In every way

Happy New Year to you!

this New Year's day!

—R. B. Innis, EMC, USN.

USS NORTHAMPTON (CLC 1)

'Tis eight bells at midnight, now, beginning

First Watch, New Year—that's the tale we're spinning.

We're here in Norfolk, Berth 72,

Moored port-side to south side, Pier 7, that's true.

With mooring lines, standard,

we're held 'longside—

Quarter breast and the bow are of wire, not hide.

Still, lo and behold, we find to the rear

A nine-inch manila from stern to

the pier.

Hoses and cables, over-side hanging,

Bring fresh water, we hope—and the phones are clanging.

Number 3 and 4 generators are running tonight,

For auxiliary purposes, and to give us some light.

Also lit off, more likely than not, Is Number 3 boiler, all steamy and hot.

Central Station reports Condition Yoke set

Fourth deck and below, on that we'll bet.

Ships present are numerous, crowded around,

Cruisers and carriers and AKs abound.

Of these many ships, the carriers count three—

Valley Forge, Intrepid, and Ranger we see.

Astern us, as happened on our last cruise,

There's one other cruiser—she's Newport News.

Auxiliaries are present, numb'ring quite a few—

Mount McKinley, Taconic, to mention but two.

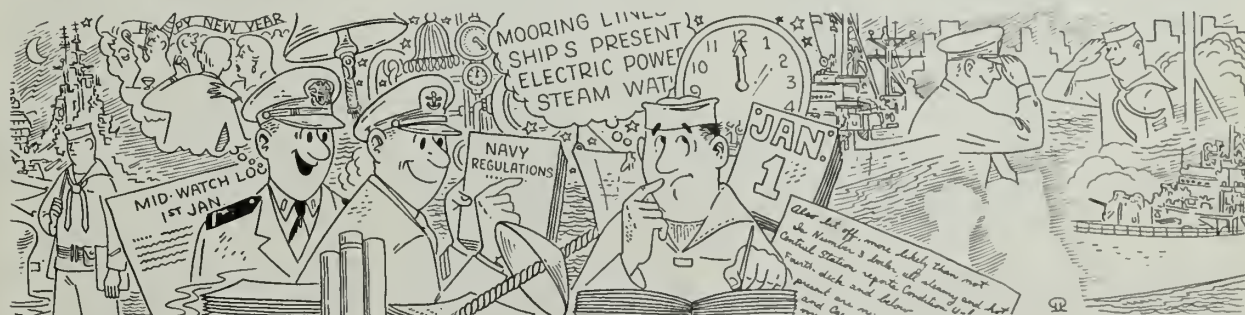
SOPA is back after meeting with Sant—

He's Vice Admiral Rees (COMNAVAIRLANT).

—Daniels, QM1, USN.

—DeWolfe, QM3, USN.

—Murchek, SN, USN.



Under Protective Cover

The pre-dawn stillness is suddenly broken. With split-second timing a major amphibious assault landing begins. The enemy's fortified shoreline—Orange Beach—lies ahead.

Out of the night comes the roar of jets and the noisy hell of pre-assault "softening up" tactics begin. Thundering explosions and flashes from the beach indicate that the aircraft

have found their target. Then the destroyers and cruisers move in—more explosions and black smoke indicate that their missiles and gunfire have scored direct hits on enemy gun emplacements.

Sharp detonations off the beaches proclaim that the frogmen got in on schedule and are doing their job—destroying obstacles that lie in the path of the landing craft.

Suddenly—with an air of terrifying finality, the entire area is lighted. There's a blinding flash and a jolting explosion. Then in the fiery-red colored sky above Orange Beach, the familiar billowing mushroom-shaped cloud appears. The whining sound of jets escorting the attack bomber that dropped the atomic bomb fades in the distance. All is quiet now.

As darkness dissolves into dawn, the invasion Fleet—which has come up from the rear—now begins to move in. Hordes of landing craft complete what appears to be an endless trek in just a matter of minutes. They leave behind foam-flecked, tell-tale wakes as they ground themselves and begin to disgorge loads of Marine infantry units and tons of support equipment. The landing assault is over. Just the "mopping-up" remains.

That was quite a battle and—believe it or not—it all took place at the Amphibious Assault Evaluator located in a building about the size of a basketball court at the U.S. Naval Amphibious Base, Little Creek, Va. The above scene was described by "The Gator," a top bi-weekly newspaper of Naval Amphibious Base, Little Creek, Va.

The Amphibious Assault Evaluator is the only one of its kind in the Navy but typical of several dramatically life-like training aids used at the various amphibious training schools at Little Creek.

More than a feeling of realism exists when this device is in operation. Highly organized striking and amphibious task forces—consisting of scaled (1 foot to 400 feet) radar picket subs, carriers, cruisers, destroyers, attack transports and all types of landing craft—sail on its blue-green vinyl 70 x 180 foot seas.

There's nothing fake about the coast and countryside either. It's an actual replica of the LaJolla—Laguna Beach, Calif., coastline. It features all types of terrain from rivers to mountain ranges. Cities and roads are painted in, while fortified buildings jut out from the countryside.

Although technical lectures are necessary during the mock atomic assault, the accent is placed on action and realism. Remote-controlled spotlights point out the advanced movements of picket submarines and aircraft. The concussion from the simulated atomic explosions—set off with black powder and magnesium—rattles the windows. Miniature explosives add another touch of realism.



AVIATION MAINTENANCE men at NAS Sanford, Fla., check parts.

Window Shopping, Navy Style

Window shopping is often a means of killing time, but the Fleet Ready Issue Store at NAS, Sanford, Fla., has found that it can also be a real time saver.

Several months ago a simplified issue procedure was set up at Sanford so that the procurement of material or repair for aircraft parts became as simple as going to the neighborhood grocery store. Under the new procedure, stores are issued to the "customer" on verbal request. To get what he wants he only has to know the stock number of the needed item.

Although this initially resulted in a considerable speedup, there was

still something lacking, for it often took quite a while to track down the correct number of just the right gizmo to fit on the proper finiche.

Now, this bottleneck has been eliminated by the FRIS Window Shopper, which consists of three seven-by-five-foot place glass show cases in which over 1200 most frequently used repair parts are displayed and numbered for easy identification. Almost at a glance the customer can learn the number of the gadget he is seeking.

The system is such a success that plans for the display of many more items are now being made.

—Wm. Stearns, CWO, USN.



NO DOUBT—Commander of Heavy Attack Wing One, CAPT J. D. Ramage, checks advantages of windows. FASRon 51 CO and Supply Officer look on.

Proceed at Best Speed

Somewhere in the North Atlantic an F8U was returning to *uss Saratoga* (CVA 60). Suddenly a message was received from the plane: "Flame out, am ejecting." Moments later the pilot was dangling at the end of a parachute, 5000 feet over a stormy sea.

Saratoga quickly signaled *uss Stribling* (DD 867), who was acting as life guard: "Pilot bailed out of F8U bearing 314, 55 miles. Proceed at best speed to rescue."

The time was 1605 as *Stribling* came to course 314. As the ship charged through the rough sea at 27 knots, so much water poured over the bridge that it sometimes looked more like a submarine.

At about 1745 two searching planes from *Saratoga* appeared off the port bow. They signaled: "We've found your man." As *Stribling* drew closer to the position, Chief Sonarman Kelly sighted the green sea marker and pilot riding the crest of a wave.

Minutes later at 1758, LCDR H. Langdon Smith, usn, executive officer of *Stribling*, leaped into the wind-tossed water, and with the stroke of an ex-frogman, swam to the aid of the downed pilot.

At 1810 the rescued pilot, LT Bill Phillips, apparently no worse for wear, was warming himself in the wardroom of *Stribling*.

The Commander of the Second Fleet later commended *Stribling* and the planes which took part in the rescue. Admiral Arleigh Burke, Chief of Naval Operations, said in a personal letter to CDR Arthur F. Rawson, CO of *Stribling*, "The proficiency and resolution demonstrated by *Stribling* . . . is an inspiration to naval aviators and destroyerman alike. My heartiest compliments to you for a job well done."

ASW Training for Italians

A group of Italian navymen are currently receiving specialized anti-submarine training at NAS Quonset Point, R. I.

Consisting of five officers and six CPOs, this group of Italian navymen are the first to receive ASW helicopter training in this country. They are being trained by personnel of Antisubmarine Helicopter Squadron Nine.

The Italian navy is in the process of acquiring the HSS-type ASW helicopter for their defense force.

SIDELINE STRATEGY

A 53-YEAR-OLD Navy medical officer, CAPT Robert F. Legge, MC, usn, has swum the 28½-mile Panama Canal in the elapsed time of 21 hours, 54 minutes.

In transiting the canal from the Atlantic to the Pacific side, CAPT Legge not only bested previous time records, but became the oldest person to accomplish this feat.

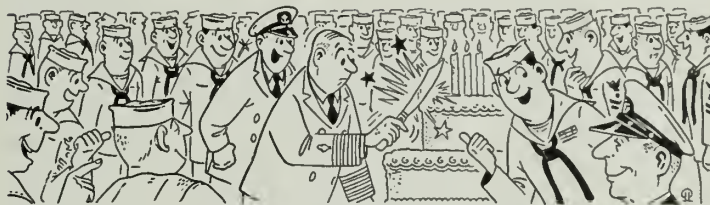
He began his swim before dawn and swam throughout the day but was forced to take a break during the night when he could not see the markers in the dark and the convoying launch ran him down. He re-entered the water the next morning, however, and went on to complete his swim across the famed waterway.

CAPT Legge was not alone

top layer of frosting, a perplexed look spread across his face. For try as he might, the knife would not penetrate beyond the frosting.

The "no-calorie cake" was in fact no cake at all. Instead of a conglomeration of calories below the frosting, there was nothing except an empty cardboard box. The cake symbolized the voluntary and highly successful excessive weight reduction program instituted by CAPT Moore since he arrived aboard *Saratoga* last April. The program "snowballed" the ship, and the "club" as the doctor calls it, now has over 500 members.

What the program means to its members is exemplified by the remarks of one of *Saratoga's* CPOs. "So far I have taken off 70 pounds and have



during his record-breaking swim through the Canal. He had two swimming companions — a boa constrictor and a huge iguana. Perhaps these encounters were responsible for the new time record.

While CAPT Legge was displaying his physical fitness, fellow crew members of the mighty *Saratoga* (CVA 60) were doing a bit of celebrating in recognition of their accomplishments of becoming more physically fit. They even had a cake for the occasion and the giant carrier's senior medical officer as the honored guest. CAPT Jerome A. Moore, MC, usn, deftly manipulated the carving knife as he prepared to slice the beautifully decorated gastronomic delight. As he thrust the blade into the

only 40 more to go. I feel better and look better. On top of that I have tested my will power, and I have come through with flying colors."

CAPT Moore initiated a similar program at NAS Cecil Field where he reduced the excess tonnage of personnel by approximately 30,000 pounds. He's enthusiastic about the reducing program because he feels that "overweight is indirectly one of the nation's number one killers."

So if you are overweight, why not attempt to protect your health by taking CAPT Moore's advice. He says: "Stop worrying about when and how much you eat and start concentrating on WHAT you eat. Be sure you follow a properly balanced diet." —HGB, JOC.

SERVICESCOPE

Brief news items about other branches of the armed services.

PNEUMATIC DUNNAGE—The Army developed it, and the Navy is testing it for ship use.

Through this inter-service cooperation may come the solution to the age-old problem of an economical means of preventing damage to military supplies during sea shipment.

Developed by the Army's Quartermaster Corps, this pneumatic dunnage will be put through the mill by the Naval Ordnance Materials Laboratory at the U. S. Naval Ammunition Depot, Earle, Red Bank, N. J.

Consisting of specially designed tough air pillows, the pneumatic dunnage is designed to be inserted between cargo and the bulkheads of a ship or the sides of a freight car. At present, time-consuming and expensive lumber barriers are usually erected for this purpose.

It is estimated that the use of this new-type dunnage will guarantee safer shipments of highly intricate military equipment and at the same time save up to 78 per cent in labor and 46 per cent in material compared to the conventional lumber shorings now used.

When not in use, the pneumatic dunnage can be deflated and will occupy no more space than a large telephone directory. Each unit weighs only 28 pounds and can be reused indefinitely.

★ ★ ★

THE AIR FORCE BALLISTIC MISSILE DIVISION in Los Angeles, Calif., is studying the vast collection of technical data received from the historic space flight of the *Pioneer* moon rocket.

The "Moon Mission" will be "flown" over and over again at the Space Technology Laboratories of Ballistic Missile Division (BMD) until the scientists and technicians are satisfied that all data is correct. Miles of electronic tape, recorded during the flight of the *Pioneer*, will furnish the statistics covering many thousands of miles of space travel.

Teletype tracking reports and electronic tapes of



NEW LIGHTWEIGHT personnel carrier (rt.) gets a work out with present steel model. Aluminum job can be lifted.

telemetered data are being run from the several electronic processing machines at BMD's Space Technology Laboratories.

In addition to the scientific data obtained, the final compilation of facts and figures on *Pioneer* can be used to refine the preliminary statistics which were based only on "quick-look" reports.

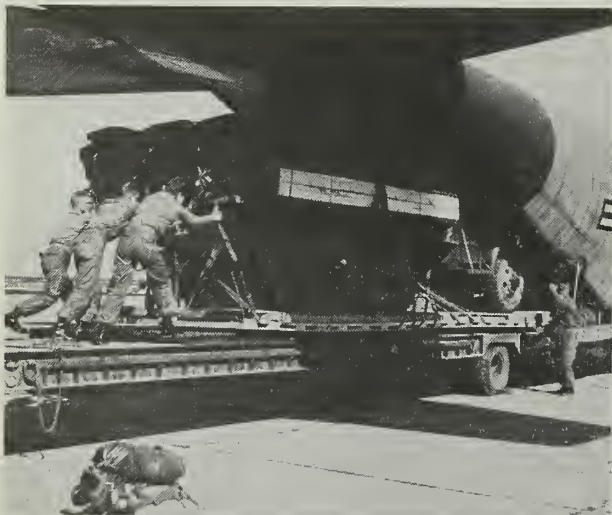
★ ★ ★

AN INSTANT MIX which has been developed by the Army Quartermaster Corps is expected to improve and speed up present methods of supplying armies in the field with fresh bread.

By substituting chemical leavening agents and dry flavoring materials for the conventional fermentation process, the time required to produce baked bread will be reduced about 70 per cent. Corresponding reductions in manpower and the amount of equipment employed are expected to result.

The mobile bakery now used by the Army in the field produces enough bread to feed 100,000 men when operating on a 24-hour basis. It weighs 50 tons, requires 250 men to operate and 50 vehicles to transport men and equipment. But it is not designed to supply many small dispersed units.

The new process is expected to provide the basis for designing small mobile field bakeries which can be attached to a combat group of about 2000 men.



HIGH FLYING TRUCKS—Army air-drops two and one half ton truck from 1500 feet with six chutes during airborne tests.

A STRATOTANKER of the Strategic Air Command has carried over 77,350 pounds of payload to an altitude of 6,671.7 feet to establish a new world record for air-lifting a maximum payload.

This new record by the KC-135 replaces the former one set by a Soviet TU-104A jet transport in September 1957 when it carried 44,214 pounds to an altitude of 6,561.666 feet.

The same Eighth Air Force jet-tanker—which is based at Westover AFB, Mass.,—previously flew from Los Angeles to New York in three hours, 42 minutes and 45 seconds to set an unofficial coast-to-coast record for transport-type aircraft. This flight was made on 12 Jun 1958 and compared favorable with the official record of three hours and five minutes set in 1957 by an Air Force F-101C Voodoo fighter aircraft.

★ ★ ★

TWO NEW MULTI-PURPOSE rubber-tired and crawler type tractors are being developed by the U. S. Army at Fort Belvoir, Va.

Designed to be lighter and smaller, these vehicles will increase mobility, reduce vehicle types, and reduce logistical support. The new tractors differ from commercial equipment which continues to get bigger and heavier in order to move dirt more cheaply.

The rubber-tired version, called BAT (ballastable all-purpose tractor), is now being built. Its front and rear sections are detachable, permitting different type bodies to be inserted. These can include a cargo body, shop units, liquid transporters, earth augers and cranes.

When ballasted (with dirt), the BAT is capable of performing dozing and prime moving operations with twice the work potential of present-day machines of the same size.

The second of the new tractors, an all-purpose ballastable crawler, is now being designed. It will have all the advantages of the BAT, plus improved mobility.

★ ★ ★

SOMETHING NEW is being added to the Army.

Within the next 10 months some American infantrymen will be sporting the new, test-proven M-14 rifle and the M-60 machinegun.

These improved, lightweight weapons fire the standard 7.62mm NATO cartridge. They will eventually replace seven infantry weapons now used by soldiers and Marines.

The M-14 will replace the M-1 Garand rifle, the M-2 and M-3 carbines, the BAR and M-3 sub-machinegun, while the M-60 will supplant the light and heavy .30 caliber machineguns.

★ ★ ★

THE ARMY HAS DEVELOPED a "Cascaded Photosensitive Image Intensifier" which will enable troops in the field to see objects in the dark.

Unlike infrared and radar, this new device gathers reflected starlight or diffused light from skyglow falling upon the objective, and then intensifies or amplifies the light to a distinguishable image. It requires no source of artificial light or radiation.

The heart of this instrument is a cascaded image tube, actually two tubes working in a series and oper-



JET-TO-JET—B-58 *Hustler*, USAF's fastest bomber, refuels from tanker to increase range. Flies more than 1300 mph.

ating through a system which focuses reflected light from objects on the field.

The first tube preamplifies the second, which intensifies the light and presents an image on the viewing surface.

★ ★ ★

TEACHING BY TELEVISION is becoming more and more popular. The Army has started teaching a two-hour course concerning guided missiles, over a 280-mile closed circuit from the Army Ordnance Guided Missile School at the Redstone Arsenal, Huntsville, Ala., to the Army Armor School at Fort Knox, Ky.

By using television, the two training centers jointly use equipment—unofficially valued at \$100 million—and skilled instructors already stationed at the Missile School.

The course is being conducted for two hours, three days a month. Designed to train high-ranking officers in the methods of inspecting missiles to determine their combat readiness, the course teaches the maintenance of six Army missiles. These missiles are the *Nike-Ajax*, *Nike-Hercules*, *Corporal*, *Lacrosse*, *Howk*, and *Redstone*.

Television offers unique advantages over regular classroom teaching. Missiles and equipment at the Missile School, for example, now become available for instruction anywhere in the United States. Also, the big six- by eight-foot screen enables a large group of students to view a small piece of gear at one time.



SERIOUS RASCAL—An Air Force air-to-ground guided missile named Rascal sits for portait at test center.

THE WORD

Frank, Authentic Advance Information On Policy—Straight from Headquarters

• **PROFICIENCY PAY**—The word is out on proficiency pay. This should be good news to some of the 19,000 petty officers in the Navy who will start receiving what amounts to \$30 a month extra income as the result of fall examinations. The impact of the increase was felt in the wallets of some CPOs last month.

The bulk of the pro pay—85 per cent—will go to Navymen in 29 "critical ratings." The remaining 15 per cent will go to those in 34 non-critical specialties whose technical knowledge and duty performance are considered "outstanding."

As a result of the August (E-9, E-8, pro-pay) examinations, about 2900 E-7s became slated for proficiency pay. Some 1400 of these started receiving their extra income 16 November. Another 1400-plus will get theirs on 16 January.

There is only one way you can get this proficiency pay: Be recommended by your commanding officer, take the test and pass it with a score high enough to qualify. If you are recommended and do take the test, you have just as good a chance as the next man. But if you are recommended and fail to take the exam, then there will be no one to blame but yourself.

Those E-4 through E-6 candidates who are selected as a result of the November exams will start receiving their pro pay 16 January.

An up-to-the-minute breakdown of the pro pay program shows that the \$30 a month additional pay in fiscal '59 will go to 2937 E-7s, 4502 E-6s, 5285 E-5s and 6851 E-4s, or to a total of 19,575 E-4s through E-7s. Officials in this Bureau esti-

mate that by the end of the fourth year of pro pay, 80,000 men and women in the Navy—or 15 per cent of all Navy enlisted personnel—will be receiving the extra pay.

The word, however, is that even though you do get this pro pay, you will have to requalify each year in order to continue receiving the added stipend.

The category of critical specialties—those receiving 85 per cent of all proficiency payments—include:

ET, AT, FT, AQ, GS, NV, GF, AC, RD, RM, SO, CT, TD, EM, AE, IC, OM, MM, EN, AM, MR, DM, SV, PH, PT, AG, QM, SM and JO.

Ratings scheduled to receive the other 15 per cent by reason of their "outstanding effectiveness" include:

CE, AO, TM, GM, MN, IM, BT, BR, AD, CM, HM, DT, DC, SF, ML, BU, SW, UT, CD, PM, PR, LI, BM, AB, YN, PN, SK, AK, MA, DK, CS, SD, SH and MU.

Each year the list of critical and outstanding effectiveness ratings is subject to change in accordance with guidelines established by the Secretary of Defense.

• RESERVISTS AND FLEET RESERVE

—If you are a Naval Reservist on active duty and have completed at least 19 years and six months of active service, you are now eligible for transfer to the Fleet Reserve. Your retainer pay, figured the same way as for Regulars, will be based at the rate of two-and-one-half per cent of basic pay received at the time of transfer multiplied by the number of years of active service in the armed forces.

Public Law 85-583 enacted 1 Aug 1958 placed Naval Reservists on active duty on the same footing as

Regulars in regard to transfer to the Fleet Reserve.

You can make application for this transfer to the Chief of Naval Personnel on NavPers Form 630. Further information can be found in BuPers Notice 1813 of 8 Sep 1958.

• **FASHION NOTE**—Ten revisions, on items ranging from aiguillettes to the markings on chambray shirts, have gone into the book as Change No. 5 to *Uniform Regs* of 1951.

The modifications include:

Discontinuance of the requirement that all officers wear mourning badges upon the death of certain officials.

Revised regulations on the wearing of the uniform by Reserves under duty with pay orders and Reserves proceeding to and from drills.

Clarified instructions on the wearing of aiguillettes.

Changes in distinguishing marks and breast insignia for airmen.

Revisions in the location of ownership markings on blue chambray shirts, dungaree trousers and undershirts.

Diagonal instead of horizontal bars to indicate more than one Navy E.

Brassards for members of Career Appraisal Teams.

Authorization for certain units to wear "ship name" sleeve marks.

Changes in the wearing of the Presidential Unit Citation ribbon.

Revised uniform requirements for Reserves on active duty.

A change in the collar device for warrant communications technicians.

• SONARMAN RATING CHANGES

The Secretary of the Navy has approved changes to the enlisted rating structure for Sonarman. As a result, sonarmen in pay grades E-4 and E-5 will soon carry one of three service ratings: Sonarman S (Submarine), Sonarman A (Airborne), and Sonarman G (Surface). Personnel in these three ratings will ad-



GET THE SPIRIT—Remember there are nine other Navymen hanging around waiting to see this issue—pass it on.

vance to the general rating of Sonarman at the E-6 level.

The present selected emergency service rating of Sonarman O (Oceanographer) will become a service rating at E-4 only. Personnel will advance to one of the other service ratings or to the Radioman rating.

The other current emergency service ratings of Sonarman G (Sonarman) and Sonarman H (Harbor Defense Sonarman) will be disestablished. An emergency rating of Harbor Defense Sonarman (ESH) will replace the SOH for Reserve use, however.

The specialization achieved in the sonarman area by the revised rating structure is expected to improve the first-enlistment sonarman's ability to operate and maintain his gear.

• **NAVYMEN WITH RADIO EXPERIENCE**—The Bureau's detailing section announces that applications are desired from enlisted personnel of all pay grades who are eligible for shore duty (are on SEAVEY) and who have had previous experience as sports announcers, either in civilian or military life.

Interested personnel should apply by letter via their COs to Officer-in-Charge, Armed Forces Press, Radio and Television Service, 250 W. 57th Street, New York 19, N. Y., or Officer-in-Charge, Armed Forces Radio and Television Service, 1016 N. McCadden Place, Los Angeles 38, Calif., or both, if interested in either locale. Include a brief resume of experience and where it was obtained, together with a brief voice tape recording. Only those personnel eligible for shore duty should apply.

• **OHIO KOREAN BONUS**—Nearly 20,000 Ohio veterans of the Korean conflict still have until 31 Dec 1958 to file their claims for a bonus.

Here's how to determine if you qualify. You must have been a resident of Ohio on the first day of active duty in the armed forces of the United States within the period 25 Jun 1950 to 19 Jul 1953 and for one year before this first date of active duty.

If you do qualify, your state's bonus is figured on \$10.00 per month for domestic service and \$15.00 per month for foreign service. The maximum is \$400.00.

A request for application forms may be sent to C. W. Goble, Director, The Korean Conflict Compensation

Fund, 293 E. Long St., Columbus 15, Ohio.

• **BUPERS MANUAL**—Information on a variety of personnel matters has been brought up to date by Change No. 30 to the *BuPers Manual*. The change includes items which deal with:

Conditions for the payment of incentive pay to human test subjects in thermal stress experiments.

Revised information on the Limited Duty Officer Program.

Policy concerning the housing of women.

Transfer of enlisted personnel in drafts.

Instructions for handling records of personnel transferred for hospitalization.

Qualifications for aircrewmembers.

Marks requirements for honorable discharge and reenlistment.

Conduct on public carriers and instructions for personnel in charge of drafts.

The occupational concept of Career Appraisal Teams.

Instructions for the assignment of Regulars and Reserves to the U. S. Military Academy Preparatory School.

Naval Uniform Shop, Clothing and Small Stores and Navy Exchange privileges for inactive duty Reservists.

• **SUBMARINE TRAINING FOR OFFICERS**—Officers in the grade of LTJG whose date of rank is on or subsequent to 1 Jan 1957, and of ENS whose date of rank is before 1 Jul 1958, may apply for submarine training for the class convening in July 1959.

Applicants must comply with BuPers Inst. 1520.6G and have their request into the Bureau of Naval Personnel before 15 Feb 1959.

BuPers Notice 1520 of 14 Oct 1958 issued the call for applicants for the July 1959 class and also announced the names of more than 175 officers who were selected to attend the Basic Submarine Officers Course convening 5 Jan 1959 at New London, Conn.

• **PROMOTED TO WARRANT OFFICER**—A total of 43 first class and 78 chief petty officers have been issued temporary appointments to Warrant Officer, W-1. These appointments are from an eligibility list established by a selection board that convened in February 1958.

QUIZ AWEIGH

Your Service Record is very important to you and to the Navy. It is a compilation of official documents which tell who you are, what you are, and what you have done in the Navy. It consists of two parts — the Service Record itself, which accompanies you from command to command, and the Enlisted Service Jacket which is maintained in the Enlisted Services and Records Division of the Bureau of Naval Personnel in Washington, D. C.

Since these records are of such importance to you, you should know something about them. Let's see if you do.

1. The buff-colored 10 x 11-inch binder or file cover which contains your entire service record that accompanies you whenever you are transferred is known as (a) NovPers 601, (b) NovPers 807A, (c) NovPers 1339.

2. Your permanent record in BuPers is known as (a) NovPers 601, (b) NovPers 807A, (c) NovPers 1339.

3. You should take it upon yourself to check your Service Record from time to time to make sure it is up to date. Regulations require commands to make an annual review of service records on (a) 1 January, (b) 30 June, (c) 1 September.

4. Your leave record can be found in your Service Record on page (a) four, (b) six, (c) eight.

5. When you take leave, you will not be paid leave rations until an individual order to adjust your pay record has been issued. This order appears in your Service Record on page (a) three, (b) five, (c) seven.

6. Your Navy test score profile — GCT, ARI, MECH, CLER, and Sonar — can be found on page three of your service record. This page is called (a) Navy Occupation and Training History, (b) Marks, (c) Enlisted Classification Record.

7. You receive performance evaluation marks which are entered on page nine of your record (a) quarterly, (b) semi-annually, (c) annually.

Answers to this month's Quiz Aweigh can be found on page 49. If you didn't get at least five of the above questions correct, you had better take some time and check your record.



THE BULLETIN BOARD

Revised Quals Are Ready on Advancement Requirements for Certain Navy Ratings

The first group of qualifications for advancement to be rewritten in terms of the new rating structure (see *ALL HANDS*, March 1958, p. 38) have now been incorporated in the *Manual of Qualifications for Advancement in Rating* (NavPers 18068, Revised).

This is the first group:

General Ratings	Service Ratings
Surveyor (SV)	None
Construction	
Electrician (CE)	CEW (Wiring) CET (Telephone) CEP (Power) CES (Shop)
Equipment	
Operator (EO)	EOH (Hauling) EON (Construction)
Construction	
Mechanic (CM)	CMA (Automotive) CMH (Heavy) BUL (Light) BUH (Heavy) BUR (Concrete)
Builder (BU)	
Steelworker (SW)	SWE (Erector) SWF (Fabricator)
Utilities Man (UT)	UTP (Plumber) UTB (Boilerman) UTA (Air Conditioning) UTW (Water and Sanitation)
Aviation Structural Mechanic (AM)	AMS (Structures) AMH (Hydraulics) AME (Safety Equipment)
Parachute Rigger (PR)	None
Dental Technician (DT)	None

The new quals for these ratings follow a revised format which reflects the change to: A single integrated rating structure for both Regulars and Reserves; emphasis on broad general knowledge in the upper pay grades of all ratings; and the use of Service Ratings to allow for specialization at the lower pay grades in some of the more technical jobs.

The revisions mentioned above are part of Change No. 11 to the



"Come back Sunday—visiting hours are from 1630 to 1830."

Quals Manual, which also contains some minor alterations. Among them are revisions in the quals for Construction Man (CN) and Dentalman (DN), a new preface to the *Manual* and a revised table of Paths of Advancement to Warrant Officer and Limited Duty Officer.

Additional changes in the *Quals Manual* will be reported as they go into effect.

New PO's Guide Is Off the Presses

A new edition of *The Petty Officer's Guide* is now off the presses.

In its 18 chapters and three appendices this book, by RADM Harley Cope, USN (Ret), and LCDR Frederick C. Dyer, USNR, offers a wide range of up-to-date information on subjects of interest to the Navyman. For instance, here are just a few of the chapter headings in this new third edition:

Advancement—The Path Up; Transfers and Rotations; Your Chances For a Navy School; Getting the Word; Traditions, Customs and Courtesies; The Defense Team; The Navy's Mission; Leadership; Personal Affairs; and Leave and Liberty.

One of the appendices contains a 60-page glossary of naval and military terms.

TAR Ship and Stationkeeper Billets Filled by Regulars, Reservists Can Transfer to USN

There are going to be more "choice" shore duty billets available within the next five years. The Naval Reserve enlisted TAR (Training and Administration of Reserves) Program is being phased-out and those billets will be filled by Regular Navy personnel.

Enlisted TAR billets that are now vacant are being converted to Regular Navy billets.

This phase-out affects all enlisted TAR stationkeepers and shipkeeper personnel, with the exception of those in the Naval Air Reserve Training Program. The TAR program under CNARESTRA remains unchanged.

Enlisted Reservists currently in the TAR program will be permitted to complete their current enlistments, and then, if qualified, will be permitted to enlist in the Regular Navy—in the same pay grade they now hold—without regard to open or closed rates or ratings. Those who do not desire to enlist in the Regular Navy will be separated.

Present TAR personnel, who have been serving on active duty since 1 Jul 1952, and who have served a total of at least 15 years on active duty by 1 July 1958, may either enlist in the Regular Navy at the expiration of their current enlistment or extension, or reenlist in the Naval Reserve and be retained on board in their present TAR status until eligible for retirement (19 years, six months).

BuPers Inst. 1130.4E spells out procedures for the discharge of TAR and other Naval Reserve personnel serving on active duty, and for their enlistment in the Regular Navy.

According to this instruction, Reservists serving with the Regular Navy establishment may enlist in the Regular Navy, if qualified, in the same pay grade, at the expiration of current enlistment or extension of enlistment in the Naval Reserve. This enlistment must be effected within 24 hours after dis-

charge on board the activity from which discharged.

If they do not enlist in the Regular Navy, they will be released from active duty upon completion of current Reserve enlistment or extension.

Reserve personnel desiring to enlist in the Regular Navy must fulfill all requirements of Article C-1403, *BuPers Manual*; instructions in effect for usn personnel re-enlisting on board their ships or stations; and the special eligibility requirements set forth in *BuPers Inst.* 1130.4E.

To meet these special eligibility requirements for enlisting in the Regular Navy, a Reservist must have served on active duty in the naval service for 12 months immediately prior to enlistment; be a citizen of the U.S., or an alien with proof of his declaration of intent to become a U.S. citizen; and fulfill the age requirements set forth in Article H-3404, *BuPers Manual*.

District commandants may authorize the enlistment of qualified TAR personnel under their cognizance upon recommendation from the individual's commanding officer. They may enlist in the U.S. Navy in the rate held at the expiration of their current enlistment or extension of enlistment in the Naval Reserve. This enlistment must also be effected within 24 hours following discharge on board the activity from which discharged.

If the TAR personnel do not enlist in the Regular Navy, they will be released from active duty upon completion of their current enlistment or extension in the Naval Reserve. However, as said earlier, personnel who have been on active duty since 1 Jan 1952, and have 15 years or more active duty as of 1 July 1958, are excepted from this ruling. They may either enlist in the U.S. Navy or reenlist in the Naval Reserve and be retained on board in a TAR billet.

Reservists serving on active duty with the Regular Naval Establishment will be retained on board for duty upon enlisting in the Regular Navy. TAR personnel enlisting in the U.S. Navy, however, shall be retained on board but reported immediately to the Chief of Naval Personnel (Pers B211) for assignment.

There are special rules governing Reservists ordered to active duty

under the provisions of *BuPers Inst.* 1306.8I dated 18 Aug 1958. They may, upon completion of 12 months' but before completion of 18 months' active duty, enlist in the Regular Navy in the rate held, if qualified.

After 18 months, but before expiration of current active duty obligation, they may enlist in the Regular Navy in their present rate only if it is among those listed as an "open rate."

If these Reservists do not enlist in the Regular Navy, they will be released from active duty upon completion of their active duty obligation.

Here is the current list of "open rates" for Regular Navy enlistment:

QM2, QM3, SMC, SM1, SM2, SM3, RDC, RD1, RD2, RD3, SOC, SO1, SO2, SO3, TM3, GS3, ET2, ET3, OM2, OM3, RMC, RM1, RM2, RM3, CT1, CT2, CT3, JO2, JO3, MU3, MR3, ICC, IC1, IC2, IC3, UT2, UT3, AT1, AT2, AT3, AG2, AG3, TD3, FN, FA, FR, SN, SA, SR, AN, AA, AR, CN, CP, CR, HN, HA, HR, DN, DA, DR, TN, TA, and TR.

New Correspondence Courses Ready for Enginemen

Two new Enlisted Correspondence Courses are now available. Four courses have been discontinued.

Enlisted Correspondence Courses for active duty personnel will be administered (with certain exceptions) by your local command instead of by the Correspondence Course Center. Your division officer will advise you whether the course for which you have applied is suitable to your rate and to the training program you are following. If it is, he will see that your application (NavPers 231) is forwarded to the Correspondence Course Center, which will supply the course materials to your command.

Personnel on inactive duty will have courses handled by the Center.

NEW COURSES

Title	NavPers No.
*Engineman 3	91518-1
*Engineman 2	91519-1
* May be retaken for repeat Naval Reserve credit.	

DISCONTINUED COURSES

Title	NavPers No.
Engineman 3, Vol. 1	91516-B
Engineman 3, Vol. 2	91517-C
Engineman 2, Vol. 1	91518-C
Engineman 2, Vol. 2	91519-C

HERE'S YOUR NAVY

Destroyers berthed at Newport R. I., will no longer find it necessary to scurry out to storm moorings each time a bad storm comes along. When fully operational, Newport's new \$20,000,000 "Destroyer Haven" will accommodate approximately 48 of them. The latest addition, Pier No. 2, scheduled for use in September, will



berth two tenders, 20 DDs, and a floating drydock.

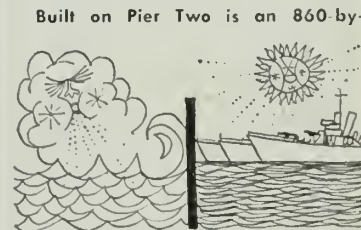
A large portion of the north side of the pier is protected by a special type fender, designed to reduce wave action. Further protection will be furnished with the completion of Pier No. 3. A new breakwater will protect all three piers.

Pier Two, which juts into Coddington Cove, is 200 feet wide and, surrounded by 35 feet of water, is capable of handling all but the largest Navy ships.



Although steam and oil are not yet available for Pier Two, ships can expect to find plenty of fresh water and electrical service. Shore steam will be on hand in 1960.

Built on Pier Two is an 860-by-



100-foot Marine Terminal Building. Part of ComDeslant's staff, plus a post office, movie exchange, communications distribution center, snack bar, pier master's office, various rest rooms, day rooms, and bunk rooms will be in the new building. Trash and garbage stations will be available both in the building and on the pier.

Without a doubt, Newport's new "Destroyer Haven" is going to be one of the finest "homes" for destroyers in the world.

Here's the Hot Scoop on How to Handle Classified Documents

IF YOU WORK with classified documents, here are some figures you might like to look over.

TOP SECRET —\$20.00

SECRET —\$15.50

CONFIDENTIAL—\$15.50

UNCLASSIFIED —\$ 3.10

These are the approximate costs for shipping one cubic foot (about 30 pounds) of documents from Washington, D. C., to St. Louis, Mo.

Classified material is expensive, not only to ship, but also to handle and store. So, the government can save a good bit of money whenever it's able to declassify or downgrade overclassified documents.

A big step toward that sort of economy took place on 26 Nov 1958, when Department of Defense Directive 5200.9 (of 27 Sep 1958) went into effect. Under the directive, millions of old TOP SECRET, SECRET and CONFIDENTIAL documents accumulated by the armed forces during the past 50 years are being declassified or downgraded.

The order pertains to some 5000 tons of messages, manuals, training films, unit records and such originated before 1 Jan 1946. Except for documents which contain infor-

mation in a few special categories, this will mean a blanket declassification. Besides saving money it will make all sorts of information available to historians, scientists, engineers and writers.

The declassification directive will make it possible to clean out a great deal of material which no longer belongs in the classified files. However, not all the deadwood is pre-1946 material.

Almost every day, through overcaution in classification or through failure to do anything about overclassified matter, many of those who prepare and use classified material are contributing to the buildup of new accumulations of deadwood. Much of that waste can be prevented. For instance, just remembering and heeding these points can be a help:

- Overclassification is costly. The higher an item is marked the more it costs to handle and store it.

- Sound classification calls for a nice balance between meeting the requirements of those with a need to know and keeping security information away from the country's potential enemies.

- Continued classification of documents which no longer warrant it is wasteful. When you think something should be classified or downgraded, refer it to the originator or office of origin with your reasons or suggestions.

- A document based on classified material doesn't have to be classified unless it too contains security information.

- Frequently review the classified papers in your custody. If you spot one you think should be declassified or downgraded, do something about it.

- Ideas and suggestions on declassifying or downgrading documents which no longer warrant classification are needed. If you have an idea submit it through the proper channels.

- Before you reach for the CONFIDENTIAL stamp, stop to think—"should this really be classified?"

- When you classify something consider the possibility of giving it a date for automatic declassification or downgrading.

- In a document that has only one or two classified paragraphs, classify those parts and indicate that the rest of the material is *unclassified*. This will simplify declassification at a later date.

These pointers are being stressed by the Office of Declassification Policy, which supervised the preparation of DOD Directive 5200.9.

The cut-off date in the directive—1 Jan 1946—was selected because much of the information in documents originated before that date has either been already declassified through other actions or no longer involves security risk.

However, since some kinds of information could still be of value to a potential enemy, certain categories have been excepted from the blanket declassification. These include: war plans of organizations higher than a Navy task force, Army division or numbered Air Force level; intelligence and counterintelligence information; radarscope photography, information on electronic countermeasures, information concerning structural or performance data of naval vessels or armament in current use; and documents that concern or affect the formulation and

WHAT'S IN A NAME

ATF Recorded Last Organized Resistance of WW II

The ship that claims she recorded the final official surrender of the last organized Japanese resistance in the Pacific after World War II has been assigned to rescue and salvage duties in the Far East.

She is USS *Cocopa* (ATF 101). Her unusual assignment took place in June 1951, when she was sent to the island of Anatahan, 70 miles north of Saipan, to accept the surrender of 19 Japanese soldiers. The soldiers, still holding out six years after Japan had surrendered in Tokyo Bay, gave themselves up to a landing party from the ocean-going tug. *Cocopa* transferred the men to Saipan, and from there they were taken back to Japan.

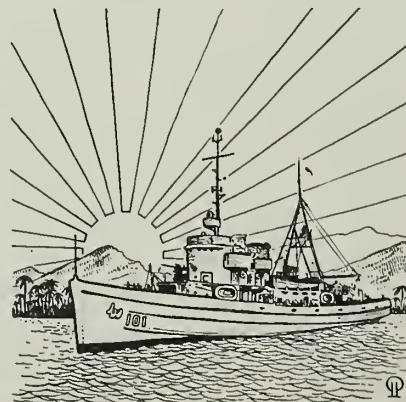
Powered by engines capable of towing any ship afloat in today's Navy, *Cocopa* carries fire fighters and equipment, dewatering pumps for refloating ships and four qualified Navy divers in her crew of 75 officers and enlisted men.

Cocopa has aided a number of ships in distress. In July 1954, when the Coast Guard Cutter *Iroquois* ran aground on a

reef at Midway, she towed the cutter back to Pearl Harbor, a distance of 1150 miles.

The ship's history records that *Cocopa* won the Service Force Pacific battle efficiency competition in 1956 and again in 1957.

The tug is named for an Indian tribe that once roamed in Arizona and northern Mexico.



conduct of U. S. foreign policy and plans relating to international affairs.

The fact that a document contains information in an excepted category does not necessarily mean the material cannot be declassified. It only means that the service which originated it must give it a careful review before it can be declassified. Even in the excepted categories all TOP SECRET material is being downgraded to *Secret*. This move will eliminate the semiannual inventory required for TOP SECRET and reduce future shipping and storage costs.

Procedure for obtaining information from any of the old documents remains unchanged. A formal request must be submitted to the custodian of the records—either the Archivist of the United States if the National Archives have custody, or the agency concerned, if the material is not in the Archives.

The Archives or the agency concerned will then locate the documents, have them reviewed for information in the excepted categories and make a determination as to whether or not the information has



"All right! Which one of you filled the windsock with Christmas popcorn?"

been declassified. If it has been declassified its release will be governed by the same regulations that cover the release of any other unclassified government document. Thus, on material which comes under the blanket declassification, the costly and time-consuming process of tracking down a document's origina-

tor or the successor office has been eliminated.

Over 75 per cent of the documents affected by the directive are in the physical custody of the General Service Administration. To expedite reduction of the backlog of old documents, that agency has been authorized to determine whether or not any of the exceptions apply to this material and to take the administrative action required for the remarking of declassified or downgraded material.

Wave CPOs Authorized to Wear Officer-Type Uniforms

Wave CPOs may now wear the dark blue officer-type uniform instead of the Navy blue uniform worn by all enlisted women.

Hereafter, all WAVES advanced to pay grade E-7 will be provided with a \$200 initial clothing allowance to purchase the officer-type blues.

Eventually all WAVE CPOs will be required to wear the recently authorized dark blue officer-type uniform.

Navy's Ordnance Disposaleers Are Doing a Bang-Up Job on Guam

In June 1944, battleships, cruisers and destroyers of one of our earlier task forces in the Pacific began a heavy bombardment to retake the Japanese-captured island of Guam in the Marianas.

During the continuous bombardment, the island felt the impact of nearly 30,000 rounds of ammunition.

An extensive cleanup campaign followed the recapture of the island. This meant not only rehabilitating the war-devastated land, but it also brought up the hazardous problem of unexploded American and Japanese ammunition. A concerted effort was made to locate all this ammo and today, nearly 14 years since the liberation of Guam, although the clean-up campaign has been highly successful, the search still goes on. From 1944 up to the present the search has uncovered more than 90 tons of explosives a year. These range from simple hand grenades to the massive 16-inch shells that blasted the enemy in those war days.

When two 14-inch high capacity projectiles were located recently, 180 feet apart on Nimitz Hill, headquarters of Commander Naval Forces Marianas, Navy disposaleers went into action.

They are known as the Explosive Ordnance Disposal Team, Special Weapons, located at the U.S. Naval Magazine. Under the direction of Chief Warrant Officer J. B. Diekey, USN, chief surface ordnance technician and officer-in-charge of the team, the situation was carefully surveyed and plans were set in motion to alleviate the hazardous condition and placement of shells.

It was decided that in order to prevent the full blast effect which would probably result in damage to nearby buildings, a low-order type explosion would be set off. The disposal team of CWO Diekey, G. D. Taylor, BMC, L. R. Urban, GMC, and P.S. Aiken, GMC, arrived in the projectile area. The first step was to make a road to the site of the shells to enable trucks carrying equipment to make

a close approach. This was carved out by J. B. McKinstry, CD1, utilizing a giant bulldozer.

The exact site of the projectiles was marked, and a working party started to free the shells from their location and place them deeper in the ravine in which they lay. This was done to lessen the danger of flying shrapnel hitting any of the buildings in the area. Then a firing wire was rigged from the projectiles to a site 3000 feet away from which the explosion could safely be set off. Personnel were evacuated from the area several hours before firing time.

Then the projectiles were set off successfully, on schedule. No damage was done and no injuries were sustained.

To the Explosive Ordnance Disposal Team on Guam, who are geared to answer calls whenever there's a report on findings of WW II unexploded ammunition, the matter was "routine." But, to the service personnel and citizens of Guam, their work means peace of mind. —Robert J. Bova, JO2, USN.

Some Pointers for the Navyman Who's Planning to Buy a Home

In October 1958 we printed a roundup of useful information based on the JAG Journal's series of "Legal Assistance Notes" by LCDR Nathan Cole, Jr., USNR.

The following advice is from a new article in the same series. It is passed on to you through the courtesy of JAG Journal and LCDR Cole.

BUYING a home?

Before you sign, here are some facts you should know about the first—and probably most important—document involved in the entire transaction.

This may have different names in different states—sales contract, purchase agreement, escrow agreement, contract to buy and sell, or perhaps something else—but no matter what it's called it has the same general meaning in all jurisdictions. It forms the basic agree-

ment between you and the seller and sets the pattern for the events which are to follow.

Usually, a printed form is used for this contract. The form is usually set up to provide the minimum requirements of common and statutory law in the state where the land is located. Special agreements, if any, between you and the seller, must be added. Generally speaking, these are the matters the agreement should cover:

- Identity of the seller and buyer and their obligation to sell and buy respectively.
- The purchase price.
- A general description of the property involved.
- Terms of the sale—or how the purchase price is to be paid.
- The type of deed to be given and the kind of title guaranteed (it

should be marketable).

- How taxes, interest, insurance and rent are to be prorated.
- The time of conveyance and when possession is to be given.
- Who is to bear the loss in case of damage to the property between the time the contract is signed and the settlement date.
- Any special agreements pertaining to the particular transaction, such as conditioning the sale on the amount of an FHA appraisal, the issuance of a termite inspection certificate or some other stipulation.

Most of these matters cause little or no trouble. However, the question of settlement or time of conveyance and the related question of possession of the premises sometimes create a problem.

In one locality a stock clause used in the sales contract reads substantially like this:

"The purchaser agrees to comply with the terms of the sale herein within . . . days from the date of acceptance by owner or as soon thereafter as title can be examined and papers prepared . . ."

You might note that the *seller's* obligation is not mentioned.

When the real estate agent or the seller tells you that 60 or 90 days is the usual time for settlement, it would seem only reasonable to assume that this will give both sides enough time to wind up all the loose ends of red tape. Sometimes it isn't. When, on the 60th day, you arrive at your new home with your wife, children, dog and load of furniture, *then* you find that, for some reason, you can't get possession. The move into an apartment, hotel or motel can be pretty depressing.

In most cases, this situation arises in the purchase of a new house which isn't completed by a promised date, but it can also happen in a transaction which involves a house already built.

The whole affair is usually the result of a basic misunderstanding. To the average person, if an act is scheduled to take place in 60 days, it should mean that you can start counting now and, on the 60th day, the act will occur.

Contracts are different—sometimes. Unless the contract specifies

New Bowditch Is Here—'American Practical Navigator'

The long-awaited new Bowditch is here. It goes on sale 6 December and will be available from sales agents of the Hydrographic Office and from the Superintendent of Documents at \$6.25 per copy.

The 1524-page edition of the *American Practical Navigator*, more widely known as "Bowditch" after Dr. Nathaniel Bowditch, author of its first edition, has been completely rewritten by the Hydrographic Office. (You can find the story of the original Bowditch on pages 12-15 of the October 1955 issue of *ALL HANDS*.)

The new Bowditch has been given a dark blue cover with gold lettering to distinguish it from previous editions. Although completely rewritten, it is still a full story of practical navigation, with useful supplementary information, presented in such manner that, if you are willing to dig into it, you can understand it without an instructor. You will be assisted by practice problems at the ends of many chapters, and by more than 500 illustrations, some in color.

However, the book is considerably condensed, being intended primarily as a reference book for navigators. In addition to the prin-

ciples of routine navigation, it includes information of use when the unusual is encountered. A 68-page index makes it possible to locate the information you are seeking.

The book is divided into eight parts. The first deals with background information and fundamentals; the second with piloting and dead reckoning; the third with electronics and navigation; the fourth with celestial navigation; the fifth with the practice of navigation under various conditions; the sixth with oceanography in its various navigational aspects; the seventh with weather; and the eighth with production of charts.

The eight parts, of some 900 pages, are divided into 44 chapters. These are followed by 29 appendices containing reference information of interest to navigators, and extracts from various government publications.

Following the appendices are 34 tables which, with their explanations, cover 272 pages. Although a number of these tables were carried over from previous editions, all tables have been checked for accuracy, arrangement and limits, and a number of changes have been made.

that "time is of the essence"—a provision you'd always do well to keep in mind when considering a contract involving new construction—either party would have a "reasonable" time after the specified date in which to carry out his part of the bargain. How much time is "reasonable" just depends.

If you are considering a house already built, the question of actual possession can be dealt with by a specific agreement naming a certain day—which need not necessarily have any relation to the time of settlement or closing. This may mean that you will have to pay rent for the house you are buying for the period between possession and settlement, but the amount demanded is usually just enough to cover the seller's mortgage payments, insurance, and such.

There's one other very important fact to remember. In a transaction involving real estate the advice and services of a lawyer are usually required and are *always* desirable.

DIRECTIVES IN BRIEF

This listing is intended to serve only for general information and as an index of current Alnavs and NavActs as well as current BuPers Instructions, BuPers Notices, and SecNav Instructions that apply to most ships and stations. Many instructions and notices are not of general interest and hence will not be carried in this section. Since BuPers Notices are arranged according to their group number and have no consecutive number within the group, their date of issue is included also for identification purposes. Personnel interested in specific directives should consult Alnavs, NavActs, Instructions and Notices for complete details before taking action.

Alnavs apply to all Navy and Marine Corps commands; NavActs apply to all Navy commands; BuPers Instructions and Notices apply to all ships and stations.

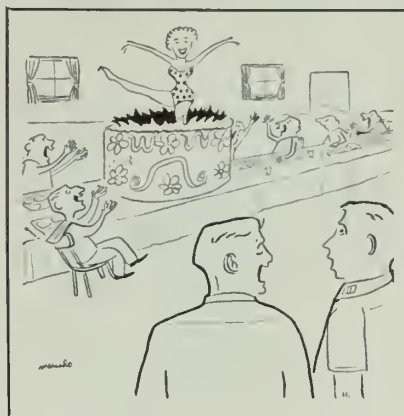
Alnavs

No. 39—Ordered that the distribution of certain brands of food be suspended until further notice.

No. 40—Ordered that the solicitation privileges of an insurance company be suspended.

No. 41—Announced approval by the President of the reports of selection boards which recommended USN and USNR officers for promotion to the grade of captain in the Medical Corps, Chaplain Corps, Civil Engineer Corps, Dental Corps, Medical Service Corps and Nurse Corps; to commander in the Medical

F. Mercado, SKSN, USN



"It's part of our new 'Personnel Morale Booster Program'."

Corps, Supply Corps, Chaplain Corps, Civil Engineer Corps, Dental Corps, Medical Service Corps and Nurse Corps.

No. 42—Ordered that the use of certain medical supplies be suspended.

Instructions

No. 1210.6A—Concerns procedures for change of designator codes for USN and USNR officers.

No. 1430.12—Provides instructions for the administration of the proficiency pay program.

No. 1440.18B—Provides information concerning the adjustment of the enlisted rating structure through formal school or in-service training.

No. 1813.3A—Provides for the deferment of transfer to the Fleet Reserve in certain instances.

Notices

No. 1416 (23 September)—Outlined changes in the plans for determining the professional fitness for promotion of officers and warrant officers on active duty.

No. 1210 (1 October)—Invited applications from certain permanently commissioned USN line officers for transfer to Supply Corps.

ANSWERS TO THIS MONTH'S QUIZ AWEIGH

(Questions can be found on page 43)

1. (a) NavPers 601.
2. (b) NavPers 807A.
3. (c) 1 September.
4. (c) Page eight.
5. (c) Page seven.
6. (c) Enlisted Classification Record.
7. (b) Semi-annually.

No. 1120 (6 October)—Invited applications from certain permanently commissioned line officers for designation for engineering duty, aeronautical engineering duty, or special duty; and also invited applications from active and inactive USNR officers for augmentation into the Regular Navy with those designations described above.

No. 1760 (6 October)—Announced the distribution of the Department of Labor pamphlet concerning the Unemployment Compensation Act of 1958.

No. 1440 (8 October)—Established procedures for effecting changes in the Group VIII Construction Ratings to conform with modifications in the enlisted rating structure.

No. 1520 (14 October)—Announced the selection of officers for the submarine school class convening 5 January in the Submarine School, New London, Conn., and announced, by dates of rank, those lieutenants (junior grade) and ensigns eligible to apply for the July 1959 class.

No. 1430 (17 October)—Listed those men advanced in rating to Senior (E-8) and Master (E-9) Chief Petty Officers.

No. 1085 (30 October)—Issued instructions for preparation of enlistment contract NavPers 601-1 (Rev. 2-58).

No. 1418 (30 October)—Announced the schedule for service-wide examinations for enlisted personnel to be held in February.

Waves Try Out Uniforms Proposed for Summer Wear

During the past several months a group of Waves has been tested for two new summer uniforms in order to evaluate them against the clothing that is now in use.

The proposed uniforms were made of light blue dacron and cotton fabric, and were designed for comfort, appearance and wearability. One of the uniforms tested was a dress with a light jacket, while the other was a two-piece outfit with a skirt and jacket.

Results of the trial have not been announced. If proved satisfactory, one of the trial uniforms will be selected to replace the currently used gray seer-sucker uniform.

If You're a Calypso Fan (and Who Isn't?) Here's Your Chance

NOW THAT WINTER IS HERE it's only natural that you or your spouse might be dreaming about duty in some tropical island. If that's the case, what could be more fitting than a tour on the most southern island of The West Indies—and that tropical paradise is none other than Trinidad.

With the headquarters of the Navy's new South Atlantic Command located there, Trinidad will, more than any time since the end of World War II, be more than a dream to many Navymen and their families.

From all indications, duty there is quite pleasant. If you're fortunate enough to get orders to COMSOLANT or to one of the facilities at NAVSTA Trinidad, here's a report on what to expect:

The island of Trinidad is about 1860 square miles in size. It's a British Crown Colony located about 15 miles off the northeast coast of Venezuela, South America.

The island itself is fairly flat except for a range of peaks in the northern section and lower hills in the southeastern portion. The plains are rolling and the hills are high and wooded. The north coast is rock-bound, and the south coast is steep. The island's east coast is exposed to a heavy surf while the west coast faces the bay and harbor area.

Trinidad's capital and principal port is Port of Spain. It is a well built city, having many wide streets, government buildings, churches, fine homes and several institutions of higher learning. The U. S. Naval Station at Trinidad is located approximately seven miles from Port of Spain.

This capital city has approximately 93,000 inhabitants. It has an excellent harbor and the island's principal trade is centered there. Many steamships visit Port of Spain, and rail and highways link the city with other points of the island.

Climate—Because of its location in relation to the equator, Trinidad enjoys the nearly constant climate of a tropical island. The weather there is, in general, somewhat more pleasant than many of the other West Indian islands. It is summer-like and healthy the year long.



"You got a property pass to leave the base with that sleigh and eight reindeer?"

Despite its proximity to the equator, Trinidad has cooler weather than most of the Caribbean islands farther to the north. The mean temperature is approximately 76 degrees. During the day the average temperature is 85 degrees, although it gets up to 90 - 95 at times. It gets hot during the day, but the evenings are comparatively cool. They average 74 degrees.

There are no serious hurricanes in Trinidad as in other sections of the West Indies. It does rain quite extensively, however, with the average rainfall being about 60 inches per year.

Housing—Housing facilities are available at the Naval Station and they are considered to be good. Government-owned rental quarters and public quarters are available for enlisted personnel in pay grade E-4 with over four years' service, and above, and for all officer personnel. There is no on-station housing for dependents of personnel below pay grade E-4.

Officer personnel are in most cases granted entry and concurrent travel for their dependents. Entry approval for enlisted dependents is based on the availability of temporary quarters. At present there's about a three- or four-month waiting period before you can obtain government quarters. Personnel are placed on a priority list for permanent housing as of the date their dependents arrive in Trinidad.

Limited civilian housing is available off the base, but in almost every instance, it is inferior to housing in

the States. The rental rates are fairly high in comparison to the accommodations received.

If you desire to occupy civilian quarters you must have them inspected and approved by your command. You must be on board the station before you can submit an application to reside in civilian housing.

Household effects—Government quarters are furnished with stoves, refrigerators, beds, mattresses and other furniture adequate for basic needs. It is suggested that you bring the following effects to Trinidad with you: pictures, table and floor lamps, cotton or straw scatter rugs, cloths, silverware, dishes, cooking utensils, linens, refrigerator dishes and water or fruit juice bottles, and electrical appliances other than stoves and refrigerators.

The electrical current in Trinidad is 60 cycles, 110 to 120 volts. State-side appliances can be operated without alterations or the use of transformers. It is highly recommended that you include a washing machine and a sewing machine in your shipment of household effects, that is, if you have them. Lightweight blankets may also be a good thing to pack, as they may be used to advantage on cool evenings.

If you don't think that your household effects will arrive in Trinidad on or before the arrival date of your dependents, it is recommended that you pack a separate box or trunk containing an ample supply of linens, cooking utensils, silverware, dishes and other essentials and bring them along as hold baggage so they will arrive at the same time as your dependents.

Clothing—Your dependents are advised to bring lightweight clothing suitable for tropical climates and preferably washable. For daytime, the usual cotton summer clothing is comfortable and sufficient for year-round wear. However, since evenings are noticeably cooler, lightweight woollens, sweaters and light coats or jackets may be worn comfortably.

There is no trend to formality in the daytime, but evening clothes may be worn as the occasion warrants. If you or your dependents expect to return to the States during

the winter months, then it will be wise to include winter clothing in your shipment to Trinidad.

It is also suggested that a reasonable supply of footwear be included in the shipment of clothing as the shoes available in Trinidad are somewhat limited and not too varied in size and design. Children's shoes, however, in sizes through nine years of age, are available, at times, at the Navy Exchange. Women would be wise to make arrangements before leaving the States for ordering shoes by mail.

Uniforms—The uniform of the day is normally undress whites without jumper for enlisted men and tropical khaki (long or short) for officers and CPOs. Inspection uniform for enlisted men is always undress white Alfa with neckerchief, while officers and chiefs normally wear tropical white long or service dress whites. Officers and chiefs should bring a plentiful supply of whites, as they are worn quite frequently.

Blues are never worn in Trinidad. However, it is advisable to bring at least one set along in the event that you'll be required to make an unexpected trip to the States during the winter months. The same goes for service khaki for officers and CPOs. Since they are rarely worn, one service khaki should be sufficient.

Food—Suitable staple foods such as meats, poultry, eggs, fresh fruits and vegetables are available at the grocery section of the Navy Exchange. The other necessary items desirable for operating a household, as well as most baby foods, are also available.

Domestic help is available and wages run approximately \$6.00 to \$8.00 per week in T.W.I. currency. This is equal to \$3.00 to \$5.00 in U.S. currency.

Medical and Dental Care—Adequate medical care is available at the Naval Station for naval personnel and their dependents. Surgical facilities are available for emergency cases only. A dental officer visits the station approximately every three months to furnish dental care for military personnel. No Navy dental care is available on the station for dependents. Dentists are available, however, in Port of Spain, and their work is comparable to that of dentists in the States.

Education—Schooling for grades one through 12 is available in a Navy-operated school on the Naval Station. Approved correspondence courses from the University of Nebraska for the high school grades (nine through 12) are used. These courses are supervised by a teacher

in the school, and financed by appropriated funds.

The school calendar year and the curriculum in all grades is similar to that in most stateside public schools. Education facilities off the base consist of private schools for which tuition is charged. These off-

HOW DID IT START

BuThis

BuThis and BuThat have been around for so long that the modern Navyman takes them for granted. However there was a time when the Navy didn't have a single Bu to its name. Over 65 years elapsed between the birth of an American Navy and the adoption of the bureau system.

In October 1775, when the Continental Congress took the first step toward establishment of a Continental Navy, it left the administration of naval affairs to a committee composed of three Members of Congress. By the end of that month the committee had been increased to seven members and was known as the Naval Committee.

Another group, the Marine Committee, consisting of one member from each of the 13 colonies, was appointed on 14 Dec 1775 to take charge of the building and fitting out of armed vessels. To assist this group two Navy boards, each consisting of "three persons well skilled in maritime affairs," were created. The first, known as the Navy Board of the Middle Department, was established in November 1776. The second, the Navy Board of the Eastern Department, was set up in April 1777.

This system left much to be desired, and in October 1779 a five-man "Board of Admiralty" was established. The board was made up of two Members of Congress and three commissioners, familiar with naval matters, who were not Members of Congress. This, too, proved unwieldy. So, in July 1781 the Board of Admiralty was discontinued and the job of running the Navy was given to Robert Morris, who acted as "Agent of Marine" until the end of the war.

After the Revolution, the Navy dwindled away for a time. In 1789, when the War Department was established, the administrative control of what little naval affairs there were fell to that department. However, attacks on American commerce soon made it obvious that our young nation would continue to need a Navy, and in 1798 the "Navy Department" and the office of Secretary of the Navy were established. From then until after the War of 1812 the Navy was run by the Secretary and a handful of civilian clerks.

The War of 1812 clearly demonstrated

that the Secretary needed advisers with technical experience to help him administer the affairs of a seagoing combat force. To meet that need Congress created a Board of Navy Commissioners in 1815. Through the efforts of that board, originally made up of Commodores John Rodgers, Isaac Hull and David Porter, the navy yard system was greatly improved and programs were drawn up for drydock, naval hospitals, a naval academy, a gun factory and an ordnance department. The board also made extensive recommendations concerning naval administration and personnel matters.

Although this system worked fine at first, it was not able to keep pace with the many technological advances which were soon being made in naval warfare. The shortcomings in this setup were pointed out by a pamphleteer who signed himself "Harry Bluff" and began bombarding Congress with charges of inefficiency in naval administration. He advocated the bureau system as a solution to the problem.

Congress adopted the plan on 31 Aug. 1842, when it passed an Act abolishing the Board of Commissioners. In its place it set up the Bureaus of Yards and Docks; Construction, Equipment and Repairs; Provisions and Clothing; Ordnance and Hydrography; and Medicine and Surgery.

Since then the organization of the Navy Department and the names and functions of its bureaus have undergone quite a few changes, but the system is still in use.



station schools are not operated on the American plan.

Religious activities—Protestant and Roman Catholic services are regularly conducted at the Naval Station Chapel. A Sunday School for children is also available. Divine services for all faiths are conducted in Port of Spain churches and naval personnel and their dependents are welcomed.

Currency and Banking—U. S. currency is used on the base, but it may be exchanged with the disbursing officer for T.W.I. currency which is used for the payment of domestic help and for making purchases at civilian establishments off the base.

The rate of exchange is approximately \$1.00 (U.S.) for \$1.70 (T.W.I.). Off the base, the Trinidad dollar, based on the pound sterling, is the medium of exchange. The Trinidad dollar is paper money, while the fractional currency is in British coin.

Banking facilities, including personal checking accounts, are available at Port of Spain. It is recommended against using personal checks from U. S. banks as you may encounter some difficulty in cashing them. Money Orders are usually preferred for mailing money to the States.

Automobiles—Adequate bus transportation is available on the station. However, owing to the large size of the naval reservation and the distances involved between facilities, a private automobile is considered almost a necessity.

Private automobiles are usually shipped from the states via U. S. merchant ships. It takes from two to three months from the time an automobile is delivered to the designated Supply activity for it to reach Trinidad. Therefore, if you are shipping a car to Trinidad, be prepared for the resulting inconvenience of being without adequate transportation while you wait for your car to arrive.

Because of the delay in shipping, it is suggested that you consider the possibility of disposing of your car in the States and obtaining one when you arrive in Trinidad. An adequate stock of small local cars of British manufacture is available on the local market for reasonable prices.

If you take your car to Trinidad, don't plan on selling it as local regu-



"... and what is Santa going to bring you?"

lations prohibit you unless you sell it to another U. S. citizen. However, many Navymen departing from Trinidad sell their cars to newly arrived personnel.

If you take your car to Trinidad or purchase one after your arrival, you'll be required to pay a local Motor Vehicle Tax before you can register your car. If your car weighs under 3100 pounds, you'll be required to pay a tax equal to 10 per cent of its "market price," and if it's over 3100 pounds you will pay 15 per cent of the "market price."

According to Trinidad law, the "market price" of an automobile is defined as "such sum as in the opinion of the Commissioner of Island Revenue is the ordinary retail selling price without having regard to any discounts, commissions, monetary deductions, or other allowances given or made by the seller thereof." Ordinarily, American-made automobiles are valued considerably higher in Trinidad than in the U. S.

Recreation — Swimming, tennis, badminton, boating, fishing, hiking, golfing, bowling, dancing and motion pictures are the favorite pastimes. The base has a new fresh water swimming pool. The Enlisted Men's Club is open for all events from 1300 to 0200 daily. Movies are shown nightly at an outdoor theater.

Liberty and recreation in Port of Spain does not compare favorably with liberty in U. S. cities. However, several hotels offer good entertainment. Personnel are cautioned that while on liberty they are subject to the local laws and may be apprehended by local police for in-

fractions of Island Regulations—particularly for disorderly conduct in a public place.

Among the things worth seeing while on liberty are the festivities opening the Lenten season which is an event of primary importance in the lives of Trinidadians. Queens Park Savannah in Port of Spain is the center of the festival's carnival activity which resembles the Mardi Gras in New Orleans. Before the carnival itself, the Calypsonians—composers and singers of Trinidad's famous folk songs—receive their share of public applause. Programs of calypso are sung nightly in "calypso tents."

Openings for Transfer To Civil Engineer Corps

Applications for transfer to the Civil Engineer Corps of the Regular Navy are being sought from permanently commissioned Regular line officers with engineering backgrounds.

To be eligible you must:

- Be a line officer junior to lineal No. 41361-00 in the 1 Jan 1958 officers' register.
- Have completed at least one year of duty afloat by 1 Apr 1959.
- Possess a bachelor's degree in architecture or architectural engineering or civil, electrical, mechanical, mining or petroleum engineering.

If you were commissioned from an NROTC unit, you will be offered a new commission and new appointment in the Civil Engineer Corps and will acquire a permanent status as a USN officer. You will not be subject to selection at the end of three years' commissioned service, nor will you be eligible to request release to inactive duty at that time.

Applications should be in letter form. They must be forwarded, via commanding officers, to the Chief of Naval Personnel (Attn: Pers-B1136) in time to reach the Bureau of Naval Personnel by 1 Apr 1959. Your commanding officer's endorsement should contain an evaluation of your professional qualifications and performance, plus recommendations as to your suitability for duty in the Civil Engineer Corps.

Applications will be acknowledged and retained on file for consideration by a selection board that will meet on or about 15 Apr 1959.

Roundup on Living Conditions at Subic Bay and Sangley Point

THE NAVY TODAY maintains two bases in the Republic of the Philippines. Both are located on the island of Luzon and fairly close to Manila. These are the U. S. Naval Base, Subic Bay, and the U. S. Naval Station, Sangley Point. Near Subic Bay are the Naval Air Station, Cubi Point, and the Naval Communication Facility, San Miguel. Sangley Point is the headquarters of the Commander, U. S. Naval Forces Philippines, who is the senior U. S. military commander in the area.

Transportation to Manila is plentiful, but is frequently substandard or entails a long waiting period between trips.

Climate—The Manila area is close to sea level, and the climate is tropical. Daytime temperatures average from 86 to 94 degrees throughout the year. Although there are no abrupt or very definite changes, the year is roughly divided into three seasons. Lowest minimum temperatures occur during the cool season, from December to March, when the maximum is normally 85 degrees, the minimum 70. The hot, dry season comes from March through June, when the daily peak is 90 to 95 degrees, with May as the hottest month. The rainy season is from July through October, and as much as 13 inches of rain may fall in a single day during August, the wettest month.

Housing—Limited housing is available at Subic Bay and Sangley Point and is mostly of a temporary type, but it is adequate and comfortable. There are a few regular houses for senior officers at both stations, but many of the quarters are converted quonsets. There is a waiting list for Navy housing at both bases, with 12 months as the average wait at Sangley Point. However, the waiting time is decreasing as new units become available. When government quarters are occupied, the full quarters allowance is withheld.

The usual facility consists of two or three bedrooms, bath (with shower, but no bathtubs), living room, kitchen and screened porch. Kitchen stoves, refrigerators, and laundry facilities are provided in government quarters, which are equipped with basic furniture.

There are few suitable civilian houses available for rent. (At present, you are not permitted to bring your dependents to Subic Bay until public quarters are available.)

Housing Effects—Bring your own glassware, kitchen appliances and electrical appliances when government quarters are not expected to be readily available.

Electric current in the Philippines, and on the stations, is standard Stateside 110 volts, 60-cycle AC, and is suitable for any type of Stateside equipment. A washing machine is regarded by most as a must. The non-automatic, wringer-type machine is recommended—for two reasons. If an automatic machine breaks down, there is usually a long wait for replacement parts. Also, in most of the local housing, the water pressure is not sufficient for proper operation of the automatic variety.

Gas appliances cannot be used in the Philippines, since there is no fuel available for them.

Bring your radios, but television is available only on a limited scale. A vacuum cleaner is generally not required, since upholstered furniture and draperies are rarely used in the tropics, and practically all rugs are of straw or fiber.

Government issue mattresses and pillows are hard. If you bring your own, you will find that foam rubber is best.

Most essential small items for setting up housekeeping can be purchased on the stations, but a waiting period for delivery may be involved.

Civilian shops in Manila are generally well stocked, but prices are high.

Automobiles—Private automobiles are a convenience, but are not essential. Roads in the Manila area are generally in a poor state of repair, and in the small villages the roads are also used by pedestrian traffic, so slow and careful driving is required.

Gasoline is not rationed and costs about 19 cents a gallon through Navy Exchange stations. Mechanical and body repairs can be obtained, but tire and battery replacement is difficult. Since the climate is hard on automobiles, undercoating is highly recommended. Most Americans also recommend that a spare muffler and flexible tailpipe be brought from the states, since these parts generally rust out quickly.

Clothing—Women should take mostly summer clothing, preferably cottons, and should include a few bright summer evening dresses. Local seamstresses are plentiful, and are highly skilled. A few lightweight woolen items are recommended, for trips to mountain resorts or to cooler climates. Shoes should be typical summer wear, including some good walking shoes. Rain gear is essential for the rainy season. Navy Exchanges carry some personal items, since prices for women's apparel in local stores are very high.

Men wear white and khaki cotton uniforms, including shorts and short-sleeved shirts, for duty. These are available at service sales outlets, or may be custom-tailored at reasonable prices. The tropical white uniform (shorts and short-sleeved shirts, with long white socks) and its alternate, tropical white longs is encouraged. Civilian clothes are authorized for off-duty wear. Excellent woolens are available through the Exchanges, and while other materials are slightly above Stateside prices, the inexpensive and excellent work of Philippine tailors will usually make up for it.

Children's regular summer play clothes, in good supply, are needed. School clothes are also needed, but these should be washable. Play shoes should be brought.

Shoes are a problem for the whole family in the Philippines. Many solve this problem through use of a mail-order catalog or a stateside

F. Mercado, SKSN, USN



"My shore rotation is a bit overdue."

personal shopper. Mail orders enter the Philippines by way of the Fleet Post Office or an APO, and thus are not subject to the import taxes of the Philippine government.

Domestic help is easy to obtain. Most families are able to employ servants because of the moderate wages. Here are the usual monthly rates of pay for domestic help (exclusive of room and board, which is generally given in addition):

Position	Minimum	Maximum
Housegirl	\$15.00	\$25.00
Houseboy	20.00	25.00
Lavandera		
(Laundress)	20.00	25.00
Cook (female)	25.00	35.00
Cook (male)	27.50	37.50
Combination		
(man & wife)	40.00	50.00

Some wives who prefer to do most of their own cooking and housework hire a part-time housegirl to take care of washing and ironing, which is generally done daily or every other day in tropical climates. In such cases, the housegirls are usually paid about \$10.00 a month for working three days a week.

Food—Commissaries and Navy Exchanges carry most foods with which Americans are accustomed. Local markets are stocked with many kinds of tropical fruit, as well as familiar varieties of vegetables. All meats are frozen, and it is therefore highly desirable to have a freezer. Stores in Manila offer a wide variety of foods, but prices are very high.

Medical Care—Dispensaries are available at both stations, and provide medical care and limited dental care for dependents. All possible dental work should be done before leaving for the Philippines, since this may be difficult to obtain on the bases. Persons who wear glasses should take along an extra pair, owing to the difficulty of getting prescriptions filled.

Education—American schools, through high school level, are available to all families, and offer educational opportunities comparable to those found in public schools in the States. Training at college level is obtainable at numerous colleges in the Manila area. In Manila, the school year begins in June and ends early in March. Government transportation to school and back is provided. Schools on the stations are

operated from August to May.

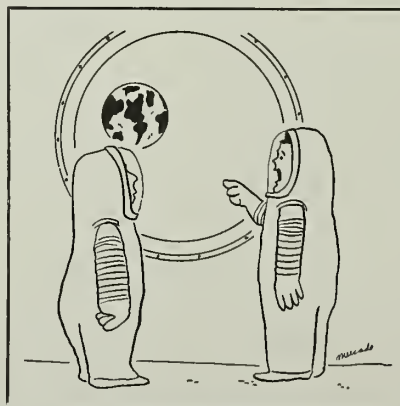
Religion—Protestant and Catholic services are held at the station chapels. The Philippines is predominantly Roman Catholic, but services of almost all denominations can be found within the Manila area.

Money and Banking—You may not spend U. S. dollars in the Philippines. On the bases you will deal in Military Payment Certificates; elsewhere, you must use the currency of the land. The Philippine peso, at official rates in January 1958, is equivalent to about half a U. S. dollar. You may not take more than \$50 in U. S. money into the Philippines, and this must be exchanged within 24 hours of arrival for either MPCs or Philippine pesos.

Recreation Facilities—A number of golf courses are located on or near the naval reservations in the Philippines, and fishing, boating, swimming and picnicking are also available. There is a great deal of family type get-togethers and entertaining. There are active clubs for officers, chief petty officers, and enlisted men on all the bases.

Camp John Hay, at Baguio in northern Luzon, is a recreation center for the Far East which is now operated by the Air Force and is available to Navy families. This is a mountain resort that offers golf, swimming, fishing and other outdoor activities in a cool and pleasant atmosphere that is a welcome respite from the normal heat and humidity of the low-lying areas around Manila. Some cottages are available, which enable families to live in the quiet life of a mountain resort in

F. Mercado, SKSN, USN



"... so I joined the Navy to see the world ... and there it is."

the States.

Pets—Certificates of good health for all pets should be obtained in the country of departure. Dogs must have anti-rabies shots. Pets are examined upon arrival, but are not required to remain in quarantine.

Check on immunization requirements. Smallpox, typhoid, tetanus, cholera and typhus shots are required.

List of New Motion Pictures Available for Distribution To Ships and Overseas Bases

The latest list of 16-mm. feature movies available from the Navy Motion Picture Service, Bldg. 311, Naval Base, Brooklyn 1, N. Y., is published here for the convenience of ships and overseas bases. The title of each picture is followed by the program number.

Those in color are designated by (C) and those in wide-screen processes by (WS). Distribution began in October.

These films are leased from the movie industry and distributed free to ships and most overseas activities under the Fleet Motion Picture Plan.

This Angry Age (1179) (C) (WS): Drama; Sylvana Mangano, Anthony Perkins.

Voice in the Mirror (1180) (WS): Drama; Richard Egan, Julie London.

Gunman's Walk (1181) (C) (WS): Drama; Van Heflin, Tab Hunter.

Dunkirk (1182): Drama; John Mills, Richard Attenborough.

Kathy O' (1183) (C) (WS): Comedy; Dan Duryea, Jan Sterling.

Imitation General (1184) (WS): Comedy; Glenn Ford, Red Buttons.

Davey (1185) (C) (WS): Drama; Harry Secombe, Alexander Knox.

Vertigo (1186) (C): Melodrama; James Stewart, Kim Novak.

Bridge on the River Kwai (1187) (C) (WS): Melodrama; Alec Guinness, William Holden.

The Key (1188) (WS): Drama; William Holden, Sophia Loren.

New Orleans After Dark (1189): Melodrama; Stacy Harris, Capt. Louis Sirgo.

Triple Deception (1190): Melodrama; Michael Craig, Julia Arnall.

Raintree County (1191) (C) (WS): Drama; Montgomery Clift, Elizabeth Taylor.

Check Point (1192): Melodrama; Anthony Steele, Odile Versois.

The Proud Rebel (1193) (C): Drama; Alan Ladd, Olivia DeHavilland.

Gun Runners (1194): Melodrama; Audie Murphy, Eddie Albert.

This Will Make You Chuckle, We Hope — It's Cartoon Contest Time

The Navy has announced plans for its Fourth All-Navy Comic Cartoon Contest. As in the past, the contest is open to active duty naval personnel and their dependents.

All-Navy Championship trophies will be presented by the Chief of Naval Personnel to the first five place winners and the winning cartoons will be published in ALL HANDS.

Entries must be submitted in time to reach the Chief of Naval Personnel (Pers G11) for judging by 1 Feb 1959.

The contest rules—the same as

they were last year — were announced in BuPers Notice 1700 of 28 Oct 1958. They are:

- All naval personnel on active duty and their bona fide dependents are eligible to submit entries.

- Comic (gag or situation) cartoons, to be acceptable, must have a Navy theme or background and be in good taste, suitable for general consumption.

- Cartoons must be in black ink on 8 x 10½ inch paper or illustration board.

- A contestant may enter as many cartoons as he wants to, but each entry must contain the following information and statement securely attached directly to the back of the cartoon:

1. Full name of originator
2. Rate or rank
3. Serial or file number
4. Duty station
5. Home town and name of home-town newspaper.
6. A brief statement *certifying the cartoon is an original.*

7. "All claims to the attached entry are waived and I understand the Department of the Navy may use as desired. Signed....." (Contestant)

8. "Forwarded." Signed by Commanding Officer or his representative.

In the case of entries by dependents, they should supply the above listed information as well as the following statement: "I am a dependent of....., (Navyman's name)

rank/rate, and serial or file number." (The winning cartoons for the Third Annual All-Navy Comic Cartoon Contest appeared in the June 1958 Issue of ALL HANDS.)

Nine Navy Training Courses Issued Direct to Commands

The Bureau of Naval Personnel is expanding its current system of distributing new and revised Navy Training Courses, and has scheduled nine more for distribution directly

Here's How Ratings Made Out in August Exams

More than 25,000 men in the Navy will feel as though they have received Christmas presents two weeks early when they are advanced to petty officer third class on 16 December.

Another 15,000 jumped the Christmas "gun" by getting their promotions a good six weeks early.

These are the ones who were advanced to E-5 and E-6 on 16 November.

Another 3500 will have received striker designators by the time this is in print. All of these advancements and striker designators are being made as a result of the August examinations.

Since all personnel in the Teleman rating will eventually become either Radiomen or Yeomen, their advancements are included in the RM and YN columns in the table below. It shows the number of USNs and USNRs (excluding Naval Air Reserve Training TARs) who were advanced in rating:

Rating	E-4	E-5	E-6	Design. Strikers	Rating	E-4	E-5	E-6	Design. Strikers	Rating	E-4	E-5	E-6	Design. Strikers
BM	325	40	2	—	SH	300	15	2	—	SW	50	25	3	—
QM	286	128	2	76	JO	66	20	10	16	UT	94	54	18	23
SM	285	173	107	80	LI	45	4	1	—	AD	1420	365	2	—
RD	613	450	179	165	DM	80	56	8	—	AT	679	839	200	216
SO	313	225	117	82	MU	116	90	10	26	AO	468	132	2	—
TM	209	181	2	82	MM	1689	1143	175	591	AQ	131	97	2	38
GM	653	88	2	—	EN	1210	465	4	397	GF	54	49	2	—
GS	47	36	5	12	MR	330	217	70	—	AC	270	210	2	—
FT	650	330	2	—	BT	1550	732	77	300	AB	325	100	2	—
NW	36	15	13	8	BR	—	—	—	—	AE	528	767	100	150
MN	50	8	1	8	EM	1014	913	100	236	AM	1197	850	15	—
ET	505	499	130	149	IC	324	248	115	103	PR	130	82	2	—
IM	35	18	1	—	ME	415	190	2	—	AG	173	133	45	45
OM	15	11	1	4	FP	375	115	2	—	TD	106	95	8	27
RM	994	715	286	298	DC	365	115	2	100	AK	300	130	2	—
CT	364	359	100	—	PM	30	12	1	—	PH	275	135	2	—
YN	1480	500	2	—	ML	22	9	1	—	PT	6	—	1	1
PN	670	250	2	—	SV	24	10	1	—	HM	1212	300	2	—
MA	133	65	6	32	CE	113	77	15	36	DT	224	70	2	—
SK	1120	300	2	263	CD	100	15	2	—	SD	42	28	2	—
DK	205	100	2	—	CM	80	30	2	—					
CS	300	34	2	—	BU	200	126	20	—					
										Total	25,420	13,588	2,000	3,556

to commands concerned.

Under this new system, the Bureau sends to commands the new and revised books as soon as they are received from the printer. Previously these books went from the printer to stocking supply points and the commands had to request them as they were needed. Now they are sent out automatically by the Bureau on the basis of one copy for each man, according to the command's allowance or on board count.

Hereafter, only *additional* copies of the new or revised Navy Training Courses will have to be ordered through normal supply channels.

The nine new courses being dis-

tributed in this manner are:

Title	NavPers No.
Electronics Technician 1 & C	10192
Mineman 1 & C, Volume 2	10187
Radioman 1 & C	10229-B
Aviation Electrician's Mate 3 & 2	10348
Commissaryman 3 & 2	10279-B
Military Requirements for PO 1 & C	10057
Steward 3 & 2	10694-B
Aviation Machinist's Mate 2	10339
Chief Hospital Corpsman	10668-A

New Photo Composing System Prints Straight Out of Files

A new photo composing system that is expected to reduce the cost of the Navy's large cataloging proj-

ects has been adopted by the Navy.

One of the system's first major uses will be in printing the Navy Stock List, a publication for which about 75,000 new pages must be composed and printed each year.

Equipment includes a "card writer" for composing copy and a "card counter" which does page layouts.

File cards replace the metal type that is used in the conventional system. The camera produces negatives from the cards in galley form, ready for plate-making in the printing process.

Cards are stored in card files and maintained with corrections. They are often used as primary records.

Add These Words to Your Navy Vocabulary—You'll Need Them

It's nothing new today to hear of a satellite circling the earth at 18,000 miles per hour; of a guided missile traveling 1500 miles to a set target; or of jet aircraft traveling faster than the speed of sound.

But when you start to read of one of these items, you have all sorts of confusing words and terms thrown at you which, a few years ago, you may never have heard, unless you had a fondness for science fiction.

Here's an exceedingly brief run-down on some of the words you'll meet. The definitions may help you keep up with current Space Navy terminology.

- **Astronautics** — The science dealing with space and space travel.

- **Atmosphere**—The gaseous envelope which surrounds the earth. Arbitrarily subdivided with increasing altitude into the **Troposphere** (0 to 10 miles); the **Stratosphere** (10 to 20 miles); the **Chemosphere** (20 to 50 miles); the **Ionosphere** (50 to 250 miles); and the **Mesosphere** (from about 250 miles and up).

- **Bioastronautics**—Space medicine.

- **Centrifugal Force**—The force which causes an object revolving around an axis (for example, a weight being whirled around at the end of a string) to move directly away from the axis.

- **Cosmic Rays**—Extremely high energy particles, traveling at al-

most the speed of light, which are bombarding the earth from space. These particles are mostly hydrogen nuclei (protons), but nuclei of other elements are also present.

- **Count-Down** — The step-by-step process of a weapon system checkout and flight readying, leading to missile launching; it is performed in accordance with a pre-designed time schedule and measured in terms of X time. The count-down is usually confined to the time from assembly at the test or loading area to the actual firing.

- **Cosmology** — The general science of the universe. It covers all of the parts, laws and functions of the universe that are already known and those that can be obtained through observation and research.

- **Earth Satellite**—The moon is the earth's only known natural satellite. It circles the earth on a fixed path or orbit about once every 28 days. An artificial earth satellite (like the Navy's Vanguard satellite) is a man-made sphere launched into space so that it circles the earth in somewhat the same manner as the moon.

- **Ellipse**—The curve formed by slicing through a cone. The shape of this curve may vary from an almost perfect circle to a long, narrow shape similar to a rubber band.

- **Elliptical Orbit**—The ellipse-shaped path followed by a heavenly body as it moves about the

center of the system to which it belongs. The earth, its moon and the planets all have elliptical orbits.

- **Launch Pad**—A specific facility from which a missile can be launched.

- **Mach Number**—The ratio of the velocity, or speed, of a body to that of sound in the medium being considered. Thus, at sea level, in air at the standard atmosphere, a body moving at Mach One, (M 1) would be approximately the speed of sound (1116.2 feet per second) or 688 knots.

- **Misfire**—An unsuccessful attempt to start a rocket motor; usually, but not always, a case where the igniter functions properly but where the propellant does not ignite (or does ignite but goes out).

- **Orbit**—The path a celestial body follows as it circles the center of its system (for example, the earth's path as it circles the sun).

- **Reentry**—That point in a body's trajectory where it first contacts the atmosphere.

- **Subsonic**—Less than the speed of sound, or less than Mach number of one.

- **Supersonic**—Faster than the speed of sound.

- **Thrust Output**—The net thrust delivered by a jet engine, rocket engine, or rocket motor.

- **Trajectory**—The path of a missile from launch to impact.

Had enough for now? More later, perhaps.

COMEBACK AT PEARL

AN AMAZING RECORD OF SALVAGE



"His Majesty grants to the United States the exclusive rights to enter the harbor of Pearl River and to establish a coaling and repair station for the use of vessels of the United States, and to that end the United States may improve the entrance of said harbor and do all other things needful to the purpose aforesaid."

This grant, concluded at a convention with King Kalakaua of Hawaii on 6 Dec. 1884, and proclaimed 9 Nov 1887, presumably contained the first reference to Pearl Harbor. From this, the harbor, then known as Pearl River, has grown into one of the mightiest of modern naval bases.

PEARL RIVER comes from the Hawaiian name *wai momi*, or "water of pearl," for this was the only place in the Hawaiian Islands where the pearly oyster was found. In the early days, sandalwood, from the forests, was brought to Pearl River, then shipped to China ports.

A coaling station was established by the United States Navy at Honolulu during the Civil War but was just about abandoned in 1870, as a result of the policy which caused all men-o-war to be supplied with full sail power and requiring the use of sails.

Several years later an inspection party investigating the defensive possibilities of Oahu, recommended that the United States obtain a cession of Pearl Harbor, plus four or five miles of the surrounding territory. They suggested that it might be deeded free of cost to the United States in return for allowing Hawaiian sugar to enter this country duty free.

At the outbreak of the Spanish-American War the United States possessed a coal depot at Honolulu that consisted of a dilapidated shed on rented ground.

Adapted from *Pearl Harbor Banner*, 7 Dec 1943, made available through the courtesy of the Historian, Bureau of Yards and Docks, Washington 25, D. C.

DOWN BUT NOT OUT—uss Shaw (DD 373) burns and sinks with floating drydock during surprise Japanese attack.





AFTER THE FLAMES *uss Shaw* with bow gone looked like this. Floating drydock had to be raised with the DD.

Congress had authorized the purchase of land at Pearl Harbor in 1901. The first acquisition deed was recorded 6 Dec 1901 (some 40 years almost to the hour before the Japanese attack.) Shortly after it was elected as the site for a large naval base in the Pacific.

In the Act of 13 May 1909, Congress provided for the construction of a drydock at Pearl Harbor, with a limit cost of \$2,000,000. Work on the dock started in September 1909 and it was scheduled to be completed in three years.

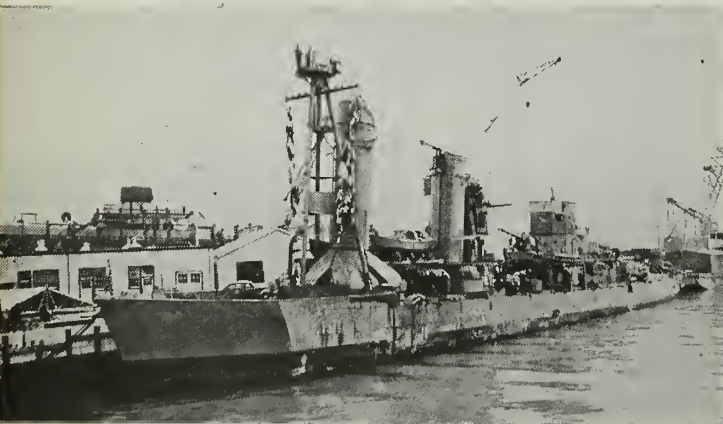
The dock, when almost completed, was wrecked by underground pressure (the source of the legend that a "shark god" had wrecked the dock because the required sacrifice of a pig and a chicken had not been made). No further work was done for the balance of the year, pending investigation. It was finally recommended that the dock be completed.

Work on what is now Drydock No. 1 was resumed during the latter part of 1914 and it was finally completed some five years later. The first ship entered 1 Oct 1919.

Just before Christmas in 1911, with the channel nearly completed, *uss California* (BB 44) entered Pearl Harbor and anchored off the Navy Yard. So far as is known, she was the first large vessel to pass through the dredged channel.

A "Special Board of Inspection of Naval Bases of the Pacific Coast" recommended in October 1919 that a first-class naval base, capable of handling the entire U. S. Fleet in time of war, should be developed at Pearl Harbor as a strategic necessity.

SNUB NOSED—*uss Shaw* was fitted with temporary bow at Pearl and sailed back to States for final repairs.



Not long afterwards, a Navy ship arrived on the scene with a cargo of machinery, tools and portable wooden buildings used in France during WW I, to be used in construction of the base.

In September 1916, the first official radio message was sent to Washington from the high-power station at Pearl. A congratulatory message was received 33 minutes later.

THE BASE continued to grow at a moderate pace. By 1939, as the National Defense construction program got underway, Pearl Harbor came near to fulfilling the recommendations of the 1919 Inspection Board.

At that time, the Navy Yard occupied 498 acres and included a battleship drydock with its supporting industrial establishment, a marine railway, administration offices, two fuel-oil tank farms (above ground), a supply depot, and housing. Altogether, it totalled 190 buildings and 17 miles of railroad tracks. The Pearl Harbor naval hospital occupied 41 acres adjoining the Navy Yard and could accommodate 1100 patients. Ford Island, a 330-acre island within the harbor waters, was the site of the Fleet air base. The submarine base occupied 32 acres of harbor waterfront.

However, during the two years from 1939 to 1941, further improvements were begun. Major extensions were made to industrial facilities in the Navy Yard, including additional drydocks, power plants, shops, storehouses, piers, wharves, barracks, office buildings, cranes, mechanical equipment and various utilities. The range of improvements included two new graving docks next to the existing battleship dock, then in operation. Dock No. 2 was a 1000-foot battleship dock; Dock No. 3 was a smaller structure 497 feet long, for destroyers and submarines.

Dock No. 2 was completed, just a week before the Japanese attack, to a stage which permitted the emergency docking of *uss Helena* (CL 50), which had been torpedoed during the attack.

SUCH WAS THE STATE of Pearl Harbor on the morning of 7 Dec 1941. The story of the attack itself is too familiar to be repeated here. At the moment we are concerned with the story of how Pearl Harbor responded to the emergency created by the attack.

One hour and 50 minutes after the attack began:

- *uss Arizona* (BB 39) was sunk at her berth, burned and blasted in two.
- *uss Oklahoma* (BB 37) capsized, and was resting with her twisted superstructure on the bottom of the harbor.
- *uss West Virginia* (BB 48) had settled into the shallow water at her berth.
- *uss California* (BB 44) was sunk at her berth.
- *uss Nevada* (BB 36) was run aground to prevent sinking.
- *uss Utah* (BB 31) was sunk, bottom up.
- *uss Pennsylvania* (BB 38), *Maryland* (BB 46) and *Tennessee* (BB 43) were damaged by bombs.
- *uss Cassin* (DD 372) and *Downes* (DD 375) were twisted by fire and *Shaw* (DD 373) had her bow blown off.

Other vessels damaged but not sunk, although in some cases seriously flooded, included the light cruisers *uss Helena* (CL 50), *Honolulu* (CL 48) and *Raleigh* (CL 7). The seaplane tender *uss Curtiss* (AV 4) and the repair ship *uss Vestal* (AR 4) were damaged too.

- YFD 2, its watertight compartments holed by more

than 150 shell fragments, had settled on the bottom.

• USS *Oglala* (ARG 1), capsized, with her side plates stove in.

Casualties on ships alone totaled 1763 enlisted personnel and officers. This figure, as recorded immediately after the battle, was raised to 2638 by losses ashore. Many others were injured; some to die later, others to recover weeks or months after the attack.

Salvage of ships and property and the rescue of personnel began the same day as the attack. In the very nature of things, any story of Pearl Harbor must center about the magnificent salvage job done during the early days of WW II.

The place was a shambles, but almost all the facilities of the world's greatest repair base were untouched. Those facilities, in the hands of the workmen—civilian and military—of Pearl Harbor, either repaired or patched up so that they could be repaired by mainland yards, all but five of the damaged ships.

This accomplishment, unparalleled in the history of naval salvage and repair, did two important things for the United States: It minimized the actual loss of ships, and it modernized nearly all the damaged vessels so they were more efficient than before.

IN LESS THAN TWO WEEKS after the attack, the battleships *California*, *Nevada* and *West Virginia* were at sea. The three light cruisers *Helena*, *Honolulu* and *Raleigh* left Pearl Harbor by the end of January.

The other ships presented more serious problems. Consider *Oklahoma*. She lay capsized in the harbor with her superstructure and masts in the mud and about a third of her bottom exposed. She was upside down.

The salvage job was to right her and float her so that she could be put in drydock and repaired. To accomplish this, divers went down to chart the ship and close the compartments to get the water out and give her buoyancy. Before the divers could work, they first had to explore the underwater parts of the ship to get an idea of the condition. Oil, filth and wreckage complicated the task.

To facilitate this preliminary exploration and the succeeding work, a scale model of the entire ship was constructed out of composition board. This model was then placed in the exact position of the capsized *Oklahoma*. It was so constructed that transverse horizontal sections could be lifted to expose compartments and the portions of the deck that were to be explored by the divers.

Before a diver went into a compartment he studied the model to get an idea of the place he was to enter. He then went down into the ship and proceeded according to the information he had gained by his study. Because of the absence of light within the ship and the oil in the water, these divers had to work by sense of touch alone. If they encountered any difficulty, they returned to the surface and again studied the model and conferred with Navy engineers, noting the changes they encountered.

Two divers entered a compartment together. One would proceed to chart the compartment while the other stayed behind to see that the lines did not become fouled among the many obstructions in the ship. The same method was used when the divers came to seal hatches and compartments.

Triangular rigs were then mounted on the hull of the ship and anchored so that their bottoms pushed



MASKED DIVERS working on USS *Oklahoma* (BB 37) stand in front of an airlock they used in the salvage project.

against one side. Cables were slung to the facing shore of Ford Island and power for the pull on these cables over the rigs was furnished by electric motors, one to each set of cables. After about three months of slow and careful pulling on these cables, *Oklahoma* was turned over.

As soon as she was right side up, the torpedo holes were patched and lift pumps began to remove the water from the ship. After some time, *Oklahoma* was afloat. Continued pumping lightened her load until she was ready to be towed into drydock.

THIS DESCRIPTION does not, of course, begin to describe the dirty, mucky, filthy and dangerous work that went on week after week; but it is the sort of work that helped save 30,000 tons of ship.

Nevada was beached in shallow water during the attack. She did not turn over. As a result, the job of salvaging her was different from and somewhat simpler than that used for *Oklahoma*. First, as much weight as possible was removed from the ship by taking off all demountable equipment and burning off such of it as could later be replaced. Then, workers installed patches over the breaches in the hull. When this was complete, the ship's watertight compartments were sealed and enough water pumped out so that the ship could be towed to drydock.

California, down by the head, lay with her forward portions under water. The first salvage step here was to get the weight of the sea off the vessel. To do this, workers built up a wooden extension of the hull around the forward part. This extension was of watertight construction and the sea weight was lifted by pumping the water out of the compartment thus erected. Shoring inside kept the walls from collapsing from the weight of the water outside.

Next came the process of installing the patches over the holes in the hull. Then came the pumping out and *California* floated again.

West Virginia was saved by the the same methods used on *California*. But *West Virginia* was more severely damaged and badly shaken up inside. To lighten the ship and in some spots to aid in making it watertight, workmen had to burn away great masses of tangled wreckage.

THERE WAS SOME SALVAGE work done on *Arizona*. Her main and secondary batteries and much ammuni-

tion were removed. In addition, much of the superstructure that was above water was burned off. At present, *Arizona* (see pp. 24-25 of the February 1958 issue of *ALL HANDS*) still rests at her berth beneath the waters of Pearl Harbor.

Oglala was lying on her side. Her salvage involved righting the vessel by means of pontoons.

Cassin and *Downes* were in Drydock No. 1 at the time of the attack and both were badly blasted. Both had to be refloated and taken out of drydock so that the drydock could be fully used. The holes in these ships were sealed and portions cut away so that the ships became watertight. The two destroyers were taken out, had their equipment removed, and then reentered the dock to be cut up for scrap. It is estimated that 50 per cent of the machinery and most of the guns were thus reclaimed.

The forward part of *Shaw* was blown away and she had sunk with the floating drydock during the attack. Her salvage was accomplished by patching up not only the holes in the ship but those in the drydock as well, for the dock had to be floated before *Shaw* could be removed. When the ship and the dock were patched up, the two were raised from the harbor bottom by pumping. Then *Shaw* was floated out and given temporary repairs. She received a new short bow, built in sections and lowered into place while she was back in dock. This fitting complete, she went back to the United States to be repaired completely. This job could have been done at Pearl, but the yard facilities were used on more urgent work.

ALL DURING THE TIME that salvage work was underway, operations were frequently held up by the necessities of war. Ships that needed extensive repairs were sometimes held up by others whose repairs could be made more quickly. Then too, during the days that followed the first attack, things had to move fast. Ships had to be readied for operations against the enemy. All this demanded the use of Pearl Harbor's facilities, and manpower that was needed for work in connection with the more immediate war effort had to be diverted from salvage.

To expedite drydock repairs, work was started on the vessels before they reached drydock. Draftsmen, planners, ship superintendents and supervisors of various shops went over the ships well in advance and sized up the job. The drafting room started to make plans for the new welded sections that were to replace the old riveted structures.

In the shops, the ship lines were laid down on the mold loft floor, templates lifted and work started on sub-assemblies of new sections.

Meanwhile, out on the ships, workmen were getting the work underway. Cutting lines were established and laid out on the structure. Light bulkheads and various fittings were removed.

WORKING CONDITIONS aboard the ships in the early stages were unbelievable. Everything was covered with black, stinking fuel oil, and debris and mud and muck in every compartment.

Finally the big day would arrive for each salvaged vessel—the day of drydocking. When the ship was pumped out sufficiently to permit her to enter the drydock, tugs towed her to the dock and she was soon resting on the blocks. No longer was the safety of the ship and the lives of those on board dependent upon

the continuous operation of numerous pumps.

The same group of draftsmen, planners, officers and supervisors who previously had examined the hull were now able to make a complete inspection, perhaps uncovering additional damaged portions. Revisions of plans and job orders had to be made to keep abreast of the new discoveries.

The shipfitters and burners now began their biggest job. Hundreds of tons of torn, twisted structure had to be burned loose and lifted out of the drydock. The structure was, in many cases, fuel oil tank bulkheads, which meant that before burning could be done with safety, men had to climb down inside the damaged, distorted tanks and clean out the oil.

Once the burners had a good start, the riggers and shipwrights played their part in the proceedings. The shipwrights constantly had to alter and adjust the staging as the cutting progressed so that the shipfitters, burners and riggers could stay within reach of their work. The riggers had to improvise means of handling the awkward sections as they were cut away. These had to be lowered to the dock floor, snaked out from under the ships to a point where the crane could reach them, and lifted out into waiting dump trucks which hauled them away to salvage scrap piles. As more and more structure was removed, the shipwrights were called upon to shore up the remaining structure to prevent it from losing its shape.

WHILE ALL THIS WAS GOING ON in the "hole," the other trades were busy elsewhere on the ship and in the drydock. Machinists were going after the main engines and auxiliaries, opening them up, cleaning out the various parts, checking for damage and signs of excessive cable insulation wear.

This latter step was necessary because many of the ships had not had regular Navy Yard overhauls during the busy year that preceded December 1941, and much of their equipment was then showing signs of overwork. Thus, the yard, in addition to repairing damage, overhauled countless auxiliaries such as pumps, valves, motors, blowers, steering and anchor gear. In some cases, these miscellaneous items were overhauled in place. In others, they were removed from the ship and overhauled in the machine shops.

The pipefitter's job was a tremendous one. Every piece of pipe from each of the numerous systems throughout the ship had to be tagged, taken down, removed from the ship and boiled out in a caustic soda tank to remove all traces of the fuel oil which permeated everything. Then they had to be rinsed and put back in the ship. In the damaged areas, large sections of several piping systems were destroyed or badly damaged. These had to be removed and, where possible, the valves salvaged for reinstallation in the new sections.

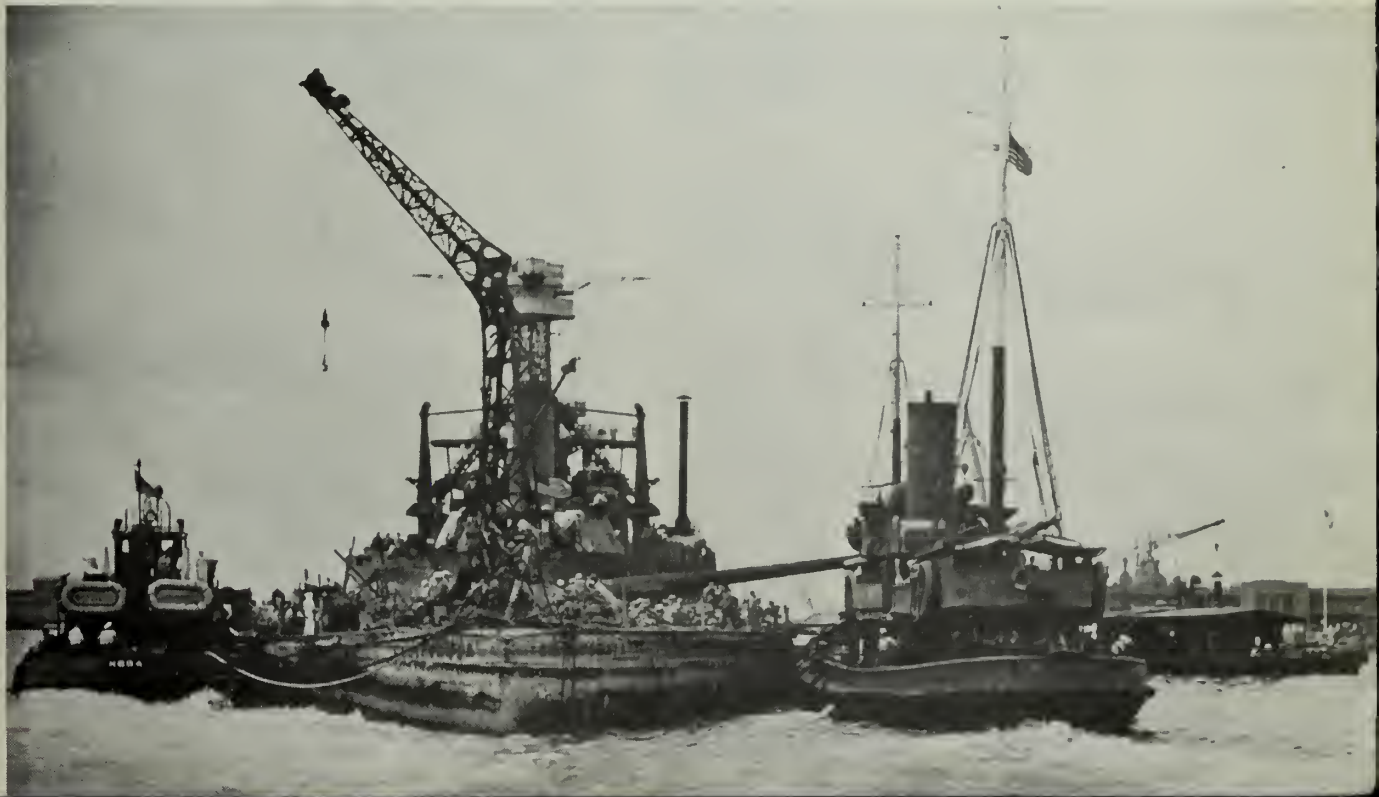
The electricians were faced with an equally monumental task. There are hundreds of motors and perhaps a half million feet of electric cables on a large ship. Once these are immersed for a considerable period of time in salt water and fuel oil they need repairs. The motors had to be completely rebuilt, which meant removal from the ship, disassembly in the shop, rewinding, renewal of bearings, assembly, balancing and testing. Some were in such condition that it was possible to reclaim them without rewinding. This was done by rinsing with fresh water to dissolve and carry away the salt (which if allowed to remain would absorb moisture

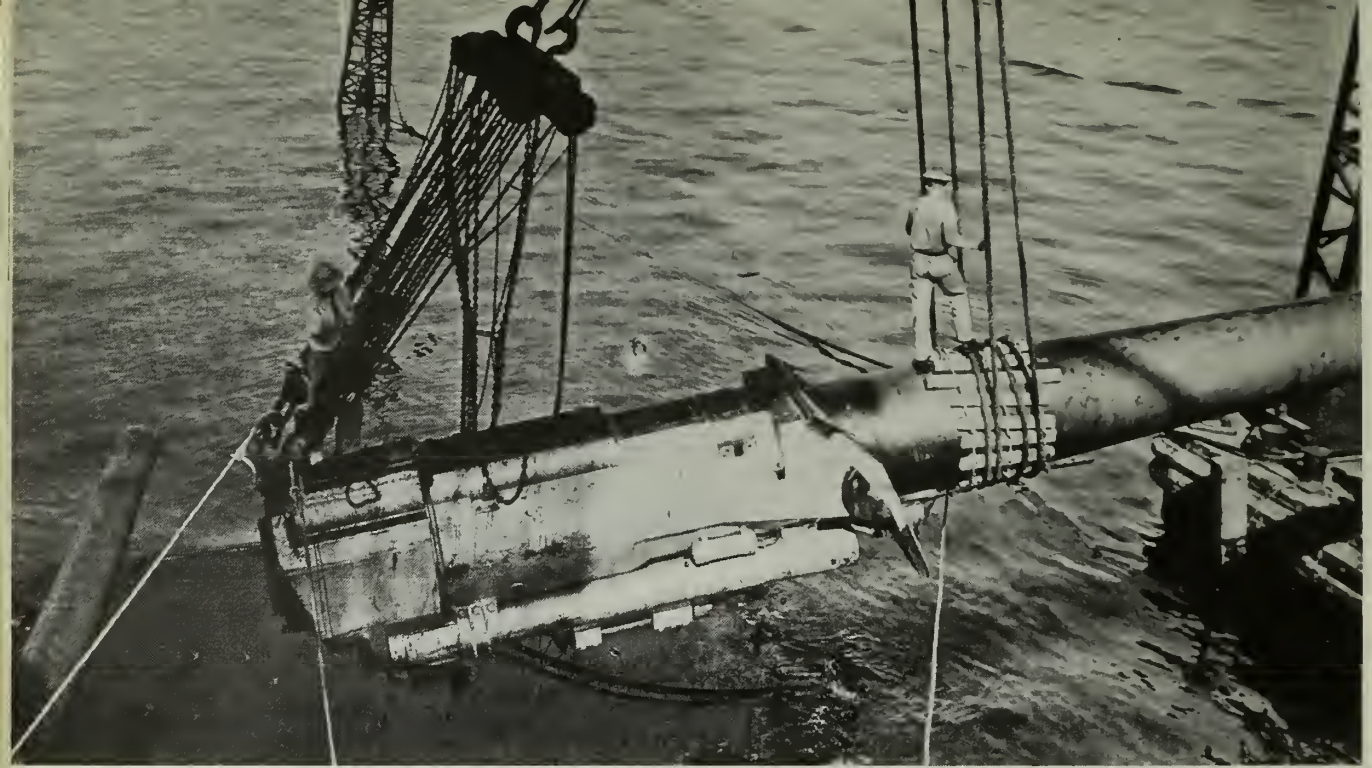


SALVAGE JOB began day after the attack. Left: Shaw lies in two pieces in dock she sank with. Rt. Flames go sky high.



SLANT OF THINGS—Salvage crews work on deck of *uss Oklahoma* (BB 37). Below: *uss California* (BB 44) floats again.

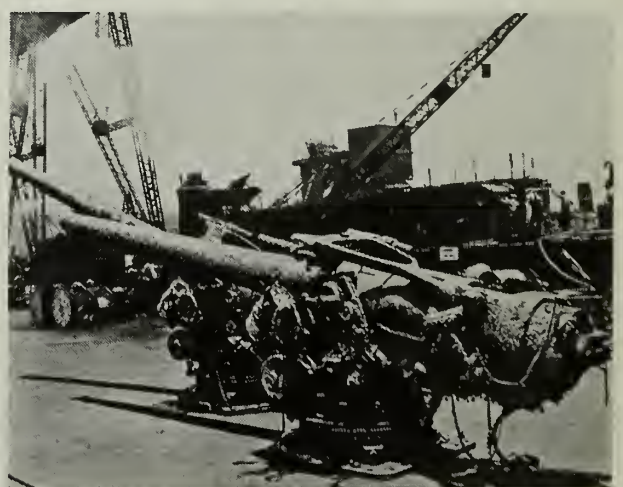




BIG GUN is removed from *uss California*. Below: Divers work to salvage gear from the sunken hull of *uss Arizona*.



BIG JOB—Women shipyard workers lend a hand. Right: Barnacled guns stand in yard after removal from sunken ship.



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in the future and break down the insulation) and then baking in ovens on which a vacuum was kept. The dried-out motor was then impregnated with insulating varnish and baked again.

Along with the other trades, the sheetmetal workers also had a sizable job. Each Navyman in a ship has a locker and there were thousands of lockers. Each locker had received a thorough coating of fuel oil inside and out. Therefore, every locker had to be removed from the ship, cleaned by sandblasting, repaired and painted and reinstalled. Furniture from the various offices, mess-rooms, and officers' staterooms had to be treated similarly. Ventilation ducts were removed for cleaning.

ONE PROBLEM that had to be dealt with during the repair period was that of testing for and dispersing poisonous gases inside a ship. The greatest hazard in working on sunken vessels is the presence of deadly gases which are formed by the decay of the numerous organic substances found aboard any ship in confined spaces. This decay is intensified in the tropics and in polluted water such as is found at Pearl.

The water trapped in the ship after it is refloated contains gases, particularly hydrogen sulphide, and continues to release them until every trace of water is removed. The gas detection unit, protected by rescue breathing apparatus, constantly checked the various compartments for the presence of hazardous gases. Signs were posted on deck to announce which areas of the ship were safe and those which were not. To make a compartment safe, it had to be "unwatered" completely with tank-cleaning apparatus. Temporary exhaust ventilation was then installed to draw off the remaining fumes.

Temporary lighting throughout entire ships was another order that had to be filled by the yard.

Not all the steel removed from the damaged area was sent to the scrap pile. Certain heavy deck and bulkhead plates were sent to the forge shop where they were straightened cold in huge hydraulic presses. The special heat-treated steel from which these plates were made could not be heated for straightening without destroying its ballistic properties.

The cutting-away phase proceeded inward and forward and aft until all the distorted and weakened structure was removed. The boundaries of the damaged hole were the edges of decks, bulkheads and shell plating which were far enough away from the center of explosion not to have been distorted. From this intact, though irregular, boundary, the building-back process was begun.

PIECE BY PIECE and section by section, the new structure was brought out of the shop to the drydock. The giant cranes swung the units, some of which weighed as much as 40 tons, into their final position. In many respects the procedure was similar to those methods employed in shipyards which were then breaking ship-building records. The sub-assemblies were built in the shop and the only work necessary in the drydock was to position the units and join them to the ship and to each other.

Starting as soon as a ship entered drydock, the compartment testing gangs started their work. Virtually every one of the hundreds of water-tight compartments had to be tested for tightness even though many had suffered no apparent damage. The shock of the explosions loosened rivets in locations far from the actual damage, causing slight leaks.

Still another group that had their work to do was the water-tight door and hatch gang. Damaged doors and hatches had to be removed and straightened for reinstallation. In addition, the hundreds of apparently undamaged doors, hatches and scuttles had to be overhauled, regasketed and put in first-class condition before the job would be considered completed.

For each ship, there eventually arrived a second momentous day — undocking. The underwater hull structural repairs were completed, the compartments all tested and leaks corrected. Sea valves were overhauled and reinstalled. Shafting and propellers were back in place and properly aligned. The hull was cleaned and painted.

The ship was ready to float again without benefit of pumps. With men standing by in those repaired compartments adjacent to the sea, the dock was flooded to a depth just below that at which the ship was expected to float. The hull was examined to make sure it was not leaking, then flooding was resumed until the vessel was afloat.

After leaving drydock, repairs were continued on the above-water portions, and on the machinery. The piping, wiring, ventilation, furniture, motors and all other equipment came aboard. Operating tests were run and, before long, the ship was ready to go to sea under her own power.

The ship was removed from the classification of "Sunk."

GREAT DAY—Old Glory flies again from stern of one of the attack victims as the ship is towed to drydock.



TAFFRAIL TALK

"**B** OUILLABAISSE AU TRUTTA," the souper-douper specialty of Charles R. Lambing, CS2 (SS), usn, is the ladle-and-bowl set's first choice in Operation Bean Soup II.

The submariner's creation reigned slurp-reme among the 12 entries that made the semi-finals of the second annual world-wide search for the Navy's best bean soup recipe. For his championship effort, Lambing received two nice soup-prizes—a golden trophy and a \$100 Savings Bond. He achieved his stirring victory with this formula:

Ingredients: one-and-one-half cups white Navy beans, one large bunch of fresh scallions (some people call them green onions), four medium ham hocks, four cups of water, garlic croutons, salt and pepper, dried parsley, grated parmesan cheese.

Directions: Soak beans in water overnight. Prepare soup stock by simmering the ham hocks in two cups of salted water for two hours. Add beans, season and boil slowly for two to three hours, or until beans are tender. Add scallions (one-quarter dices) and a handful of the green tops cut in one-inch lengths. Simmer one-half hour longer. Sprinkle each serving with grated cheese, parsley and garlic croutons. Serve.

The Navy's new champion bean souper is leading commissary-man of *uss Trutta* (SS 421). He entered the Navy in 1948, graduated second in his class at the Basic Enlisted Submarine School in 1949 and served in *uss Balao* (SS 285) and *Archerfish* (SS 311) before his assignment to *Trutta*.

The second-prize recipe was submitted by E. H. Busbee, CS1, usn, who has been helping to make dining a pleasure at the Naval Station, Argentia, Newfoundland, for the past 16 months.

Third place went to Karl R. Schneider, CS1, usn, of NAS, Memphis, Tenn., which was headquarters for the contest. Schneider, who finished second in last year's competition, has fed Navymen at Memphis for the past 14 months.

The recipes entered came from as far away as Wilkes Station in Antarctica.

Judges of the soup-bowl classic were VADM E. W. Clepton, Chief of Naval Material; Armistead F. Clay, President of the Memphis Council of the Navy League; Miss Ruth Jacquemine, food editor of the *Memphis Commercial Appeal*; and U. S. Representative Clifford Davis of Tennessee.

★ ★ ★

And—since we have another inch or two of reporting to do—from the files of our vital statistics editor, we find that during a WESTPAC deployment, the light cruiser *uss Roanoke* (CL 145) had a total of 119,278,584 shaft revolutions while steaming 48,258 miles in 204.5 days.

During that time, 24.3 tons or 48,600 pounds of sand were used to scrub *Roanoke's* decks—that's enough to make a concrete walk 476 feet long and three feet wide; 3249 gallons of paint were applied—that's enough to cover 1,949,400 square feet or nearly 45 acres; 117,800 pills were issued—that's enough to fill 118 quart jars; and *Roanoke* dropped her anchors 18 times—that's the exact number required to anchor *Roanoke* 18 times.

The All Hands Staff

The United State Navy

Guardian of our Country

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends. The United States Navy exists to make it so.

We Serve with Honor

Tradition, valor and victory are the Navy's heritage from the past. To these may be added dedication, discipline and vigilance as the watchwords of the present and future. At home or on distant stations, we serve with pride, confident in the respect of our country, our shipmates, and our families. Our responsibilities sober us; our adversities strengthen us. Service to God and Country is our special privilege. We serve with honor.

The Future of the Navy

The Navy will always employ new weapons, new techniques and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war. Mobility, surprise, dispersal and offensive power are the keystones of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past. Never have our opportunities and our responsibilities been greater.

ALL HANDS

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• AT RIGHT: LINE OF DUTY —
Crew member of *USS Rankin* (AKA 103) makes sure LCMs are snugged down as the attack cargo ship prepares for sea.

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